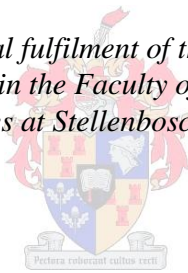


# **Turnover intention and employee engagement: Exploring eliciting factors in South African audit firms**

**Nicola van der Westhuizen**

*Thesis presented in partial fulfilment of the requirements for the degree  
of Master of Commerce in the Faculty of Economic and Management  
Sciences at Stellenbosch University*



Supervisor: Dr Billy Boonzaier

April 2014

## **PLAGIARISM DECLARATION**

Plagiarism is the use of ideas, material and other intellectual property of another's work and to present it as my own. I agree that plagiarism is a punishable offence because it constitutes theft.

I also understand that direct translations are plagiarism. Accordingly all quotations and contributions from any source whatsoever (including the internet) have been cited fully. I understand that the reproduction of text without quotation marks (even when the source is cited) is plagiarism.

I declare that the work contained in this thesis, except otherwise stated, is my original work and that I have not previously (in its entirety or in part) submitted it for obtaining any qualification.

Signed: Nicola van der Westhuizen

Date: April 2014

## ABSTRACT

In response to globalisation and competition, today's organisations are changing at an accelerating and radical pace. A review of the literature revealed that the demanding and often repetitive nature of work increases employees' turnover intention. This is generally attributed to a lack of employee engagement. This trend is especially evident within the South African financial services industry. Without a functional workforce, no organisation can survive. Therefore organisations within this sector need to establish a balance between the provision of meaningful work, and profitability.

The primary objective of this research study was to develop and empirically test a structural model that elucidates the antecedents of variance in turnover intention and employee engagement among employees employed by audit firms operating in the South African financial services industry. In addition, this research study investigated whether employees employed by these audit firms engage in job crafting to modify their work environment (i.e. job resources, personal resources and job demands, as illustrated in the Job Demands-Resources model) (Demerouti, Bakker, Nachreiner & Schaufeli, 2001) to cultivate meaningful work that decreases turnover intentions while increasing employee engagement.

In this research study, an ex post facto correlational design was used to test the formulated hypotheses. Quantitative data was collected from 391 employees employed by audit firms operating in the South African financial services industry. Data was collected specifically for the purpose of this research study. Participation was voluntary. A self-administered web-based survey was distributed electronically to the participants. The data collected was strictly confidential and anonymous. The survey comprised seven sections. The first two sections measured the participants' biographical and employment information. Subsequent sections measured specific latent variables using valid and reliable measuring instruments. These instruments include the Utrecht Work Engagement Scale (UWES-9) (Schaufeli, Bakker & Salanova, 2006), the Turnover Intention Scale (Moore, 2000), the Psychological Meaningfulness Scale (May, Gilson & Harter, 2004), the Job Crafting Scale (Tims, Bakker & Derks, 2012), and the six-item Proactive Personality Scale (Claes, Beheydt & Lemmens, 2005). Data was subjected to a range of statistical analyses.

The findings shed light on the seriousness of turnover intention and the lack of employee engagement among employees employed by audit firms operating in the South African financial services industry. It provides South African industrial psychologists with much

needed insight into the presenting problem. With reference to the highlighted managerial implications of the research findings and the recommended interventions, industrial psychologists can ensure the retention and engagement of employees.

## OPSOMMING

Globalisering en mededinging veroorsaak dat hedendaagse organisasies al hoe vinniger en ook ingrypend verander. 'n Oorsig van die literatuur het getoon dat werknemers se voorneme om van werkplek te verander al hoe meer toeneem weens die veeleisende en dikwels herhalende aard van die werk wat hulle doen. Hierdie voorneme is veral in die Suid-Afrikaanse finansiële diensbedryf sigbaar en kan toegeskryf word aan 'n gebrek aan werknemerbegeestering. Geen organisasie kan egter sonder 'n funksionele werksmag oorleef nie. Gevolglik moet organisasies in hierdie bedryf sorg dat hulle 'n balans tussen betekenisvolle werk en winsgewendheid skep.

Die hoofdoel van hierdie studie was om 'n strukturele model te ontwikkel en empiries te toets wat lig werp op die voorkoms van verskille in die voorneme om van werkplek te verander en werknemerbegeestering onder werknemers in diens van ouditeursfirmas in die Suid-Afrikaanse finansiële diensbedryf. Daarbenewens het hierdie studie ook ondersoek of werknemers in hierdie ouditeursfirmas betrokke is by werksfatsoenering om hulle werkomgewing aan te pas (m.a.w. werks hulpsbronne, persoonlike hulpsbronne en taakeise, soos in die *Job Demands-Resources model* aangedui) (Demerouti, Bakker, Nachreiner & Schaufeli, 2001) om betekenisvolle werk te skep wat hulle voorneme om van werk te verander, kan verminder en terselfdertyd werknemerbegeestering kan aanvul.

'n Ex post facto korrelasie-ontwerp is gebruik om die geformuleerde hipoteses te toets. Kwantitatiewe data is by 391 werknemers in diens van ouditeursfirmas in die Suid-Afrikaanse finansiële diensbedryf ingesamel. Die data is spesifiek vir hierdie studie ingesamel. Deelname was vrywillig. 'n Selftoegepaste webgebaseerde opname is elektronies onder die deelnemers versprei. Die dataversameling was streng vertroulik en anoniem. Die opname het uit sewe afdelings bestaan. Die eerste twee afdelings het die biografiese en werksinligting van die deelnemers ingesamel. Die daaropvolgende afdelings het spesifieke latente veranderlikes met behulp van geldige en betroubare instrumente gemeet. Hierdie instrumente was die *Utrecht Work Engagement Scale*, UWES-9 (Schaufeli, Bakker & Salanova, 2006), die *Turnover Intention Scale* (Moore, 2000), die *Psychological Meaningfulness Scale* (May, Gilson & Harter, 2004), die *Job Crafting Scale* (Tims, Bakker & Derks, 2012), en die ses-item *Proactive Personality Scale* (Claes, Beheydt & Lemmens, 2005). Die data is aan 'n reeks statistiese analyses onderwerp.

Die bevindinge werp lig op die erns van voorneme om van werkplek te verander en die gebrek aan werkenemerbetrokkenheid onder werknemers in diens van ouditeursfirmas in die Suid-Afrikaanse finansiële diensbedryf. Dit bied aan Suid-Afrikaanse bedryfsielkundiges belangrike insae in die tersaaklike probleem. Bedryfsielkundiges kan, met verwysing na die aangeduide bestuursimplikasies van die bevindinge en aanbevelings van hierdie studie, die behoud en begeestering van werknemers verseker.

## **ACKNOWLEDGEMENTS**

First and foremost, I would like to praise and thank Almighty God, for He has given me the opportunity, ability and motivation to complete this study.

I would also like to extend my appreciation to the following individuals for their contribution to this study:

Billy and Michèle Boonzaier for their encouragement and commitment throughout the completion of this study. Their direction and insights were invaluable.

Prof. Martin Kidd, statistician at the Stellenbosch University, for his guidance and assistance with the statistical analyses conducted as part of this study.

The participating audit firms for enabling me to gather data within their regional offices as well as the audit interns, and their managers, for participating in this study.

To my parents, Theuns and Ronel van der Westhuizen, for their continuous support, reassurance and allowing me the privilege of education. Also, to my brother and sister, Johan and Charlotte, for their words of encouragement and genuine interest in this study.

To Hansie Vermooten, for his constant motivation, care and genuine interest in this study. I cannot thank him enough.

## TABLE OF CONTENTS

PLAGIARISM DECLARATION.....	i
ABSTRACT.....	ii
OPSOMMING.....	iv
ACKNOWLEDGEMENTS.....	vi
TABLE OF CONTENTS.....	vii
LIST OF FIGURES .....	xi
LIST OF TABLES .....	xii
CHAPTER 1 .....	1
1. BACKGROUND TO THE STUDY .....	1
1.1. INTRODUCTION.....	1
1.2. RESEARCH PROBLEM .....	5
1.3. RESEARCH INITIATING QUESTION .....	5
1.4. OBJECTIVE OF THE STUDY .....	5
1.5. RESEARCH METHODOLOGY .....	6
1.6. DELIMITATIONS .....	7
1.7. OUTLINE OF RESEARCH STUDY .....	7
1.8. GLOSSARY.....	8
CHAPTER 2 .....	12
2. LITERATURE REVIEW .....	12
2.1. JOB DEMANDS-RESOURCES MODEL .....	12
2.2. LATENT VARIABLES OF INTEREST .....	15
2.2.1. Turnover intention .....	15
2.2.2. Employee engagement .....	17
2.2.3. Job crafting.....	20
2.2.4. Meaningful work.....	23
2.2.5. Proactive personality.....	25



2.3. INTERRELATIONSHIPS AMONG THE LATENT VARIABLES OF INTEREST .....	26
2.3.1. Direct relationships among the latent variables of interest .....	26
2.4. SUMMARY .....	36
CHAPTER 3 .....	37
3. RESEARCH METHODOLOGY .....	37
3.1. INTRODUCTION .....	37
3.2. STRUCTURAL MODEL EXPRESSED IN LISREL NOTATION .....	38
3.3. SUBSTANTIVE RESEARCH HYPOTHESIS .....	38
3.4. RESEARCH DESIGN .....	39
3.5. RESEARCH PARTICIPANTS .....	41
3.6. MEASURING INSTRUMENTS .....	44
3.6.1. Biographical information .....	45
3.6.2. Employment information .....	45
3.6.3. Utrecht Work Engagement Scale (UWES-9) .....	46
3.6.4. Turnover Intention Scale .....	47
3.6.5. Psychological Meaningfulness Scale .....	47
3.6.6. Job Crafting Scale .....	47
3.6.7. Proactive Personality Scale .....	48
3.7. ETHICAL CONSIDERATIONS .....	49
3.8. MISSING VALUES .....	51
3.9. STATISTICAL ANALYSIS .....	51
3.9.1. Item analysis .....	51
3.9.2. Confirmatory factor analysis .....	52
3.9.3. Parameter estimation .....	52
3.9.4. Structural equation modelling .....	52
3.9.5. Partial Least Squares Regression .....	53

3.10. SUMMARY.....	53
CHAPTER 4 .....	54
RESULTS .....	54
4.1. INTRODUCTION.....	54
4.2. VALIDATING THE MEASUREMENT MODEL .....	54
4.2.1. Item analysis .....	54
4.2.2. Measurement model evaluation .....	57
4.3. TESTING THE STRUCTURAL MODEL .....	62
4.3.1. Fitting the comprehensive LISREL model .....	62
4.3.2. Investigating path coefficients .....	64
4.4. PARTIAL LEAST SQUARES PATH ANALYSIS .....	65
4.4.1. Reliability analysis.....	66
4.4.2. Investigating path coefficients .....	68
4.5. REPORTING AND INTERPRETING FINAL SCORES .....	71
4.5.1. Interpreting the employee engagement score .....	71
4.5.2. Interpreting the turnover intention score.....	72
4.5.3. Interpreting the meaningful work score .....	73
4.5.4. Interpreting the job crafting score.....	73
4.5.5. Interpreting the proactive personality score.....	74
4.6. INTERPRETING THE PROPOSED HYPOTHESES .....	75
4.7. SUMMARY .....	79
CHAPTER 5 .....	80
IMPLICATIONS, LIMITATIONS AND RECOMMENDATIONS .....	80
5.1. INTRODUCTION.....	80
5.2. MANAGERIAL IMPLICATIONS.....	80
5.2.1. Job crafting.....	80
5.2.2. Meaningful work.....	84

5.2.3. Proactive personality.....	90
5.3. LIMITATIONS OF THE STUDY AND RECOMMENDATIONS .....	96
5.4. SUMMARY .....	98
REFERENCE LIST .....	100
APPENDIX A: Letter of proposal .....	132
APPENDIX B: Informed consent form .....	134

## LIST OF FIGURES

<i>Figure 2.1.</i> The Job Demands–Resources model .....	15
<i>Figure 2.2.</i> Theoretical model of turnover intention and employee engagement.....	36
<i>Figure 3.1.</i> Proposed turnover intention and employee engagement structural model expressed in LISREL notation.....	38
<i>Figure 3.2.</i> Ex post facto correlational design .....	40
<i>Figure 4.1.</i> Fitted employee engagement measurement model .....	58
<i>Figure 4.2.</i> Fitted job crafting measurement model .....	59
<i>Figure 4.3.</i> Fitted turnover intention, proactive personality and meaningful work measurement model .....	61
<i>Figure 4.4.</i> Fitted turnover intention and employee engagement structural model.....	63
<i>Figure 4.5.</i> Revised turnover intention and employee engagement structural model .....	66
<i>Figure 4.6.</i> PLS report for the revised turnover intention and employee engagement structural model.....	70

## LIST OF TABLES

Table 3.1 <i>Profile of the Sample Population</i> .....	43
Table 3.2 <i>Cronbach's Alpha of the UWES-9 Subscales</i> .....	46
Table 3.3 <i>Cronbach's Alpha of the Job Crafting Scale Subscales</i> .....	48
Table 4.1 <i>Means, Standard Deviations and Internal Consistency Reliabilities</i> .....	54
Table 4.2 <i>Factor Loadings for Hypothesised Relationships</i> .....	64
Table 4.3 <i>Reliability Statistics for the PLS Path Model</i> .....	67
Table 4.4 <i>Factor Loadings Obtained for the PLS Path Model</i> .....	69
Table 4.5 <i>Scoring Template for UWES Mean Scores</i> .....	71

# **CHAPTER 1**

## **BACKGROUND TO THE STUDY**

### **1.1. INTRODUCTION**

The financial services industry (FSI) comprises firms involved in a wide variety of business activities (i.e. investing, lending, insurance, securities trading and securities issuance). This is no different in South Africa. Even today, more products and services continue to be added. Firms operating in this industry form part of the Banking, Insurance, Securities Brokerage (or Financial Advisory Services), Investment Banking, Securities Trading, Investment Management (or Money Management), Securities Analysis, Financial Planning, or the Johannesburg Stock Exchange (JSE) business line (Kolakowski, 2013).

In recent years, the unpredictable and ever-changing nature of the South African FSI structure has been brought about by changes in the external environment:

- As a result of changes in industry regulations, numerous South African organisations are exploring new business areas;
- Technological developments have enabled South African organisations to deliver their services in innovative ways;
- Globalisation has assisted international organisations to entering Africa through the South African market; and
- Foreign exchange controls have been reduced, thereby promoting global competition.

Despite these structural fluctuations, the South African FSI is highly regarded internationally because of its strong regulatory and legal framework (Richards, 2013). According to the Global Competitiveness Report 2012–2013, South Africa has achieved significant financial market development (ranked 3<sup>rd</sup>). This indicates high confidence in South African financial markets (Schwab, 2013). The two primary regulatory authorities within this industry are the South African Reserve Bank and the Financial Services Board. These authorities work closely with the Office of the Registrar of Companies of the Department of Trade and Industry, and with other advisory committees to fulfil regulatory and supervisory duties through the Policy Board for Financial Services and Regulation to the Minister of Finance (MBendi Information Services, 2013). In addition to these authorities, a small number of audit firms, referred to as the Big Four (viz. Deloitte, Ernst & Young,

PricewaterhouseCoopers, and KPMG), audit most of the country's biggest accounts (Richards, 2013).

Even though there are differences in the nature of work environments within companies in the FSI industry, typical characteristics have been identified. For many years, researchers erroneously assumed that, on average, working conditions in the FSI were better than those of other industries. Recent statistics proved otherwise. According to Eurostat's Population and Social Conditions database (2010, as cited in Miller, Cabrita & Vargas, 2011), jobs in the FSI involve sedentary work, regular contact with customers, and the recurring use of computers. These conditions negatively affect employees' mental and physical well-being. The detrimental effect of these conditions is exacerbated by the generally demanding and stressful nature of employment in modern organisations. According to Harnois and Gabriel (2000), the proportion of Japanese employees who suffer from severe stress rose by 10 percent (53 percent to 63 percent) from 1982 to 1997. These authors mention that, in developing countries like South Africa, the negative impact of work-related stress is an increasing cause for concern.

Globally, stress is one of the most common work-related problems in the FSI. According to the German Wage Indicator report, it is the third most stressful sector after hotels, restaurants and catering, and health care (Van Kleveren & Tjijdens, 2007). These results were confirmed by Eurofound's European Working Conditions Survey (2005, as cited in Miller et al., 2011). In Austria, 94 percent of employees in this industry felt stressed and time pressured at work (Parent-Thirion, Fernández Macías, Hurley & Vermeulen, 2006). Similar statistics were reiterated in 2009 by Spanish employees. A total of 54.3 percent of Spanish employees felt subject to high to very high stress levels. In France, 33.7 percent of employees indicated that they regularly worked overtime, and 72.4 percent felt their work required immediate response (Magaud-Camus, Sandret, Floury, Guignon, Vinck & Waltisperger, 2006, as cited in Miller et al., 2011). Thirty-eight percent of Swedish employees revealed that they cut down on lunches, worked overtime, and took work home at least once a week (Work Environment Authority, 2010, as cited in Miller et al., 2011).

The stressful nature of employment in the FSI is further exacerbated by uncertainty associated with today's business environment (i.e. recession, regulatory changes, fiscal pressures, and political and social unrest) (PricewaterhouseCoopers, 2012). The conclusion can be drawn that these push-and-pull factors have a negative impact on employees' work experience. Even though statistics reveal a progressive employment rate for well-skilled

individuals in the FSI across the globe since 2000, this should not be considered as an indication of prosperity. The fact that approximately 74 000 individuals were newly appointed in finance and other business services in South Africa in 2012 (Statistics South Africa, 2012) reveals the problematic nature of jobs in the South African FSI, and the resultant impact on employee retention and engagement.

The prevalence of turnover intentions in modern organisations has caused great concern across the globe. Deloitte's global talent survey, Talent Edge 2020 (Deloitte, 2011), conducted among employees from North America, South America, Asia Pacific, Europe, the Middle East and Africa, revealed that nearly 65 percent of employees were planning to leave their organisation. The remaining 46 percent were less inclined to quit their jobs, because of changing jobs (nine percent), being promoted (22 percent), or changing to new positions (15 percent) within the preceding 12 months. Unexpectedly, of the 46 percent of employees, approximately 31 percent were not satisfied with their jobs. Since they were not engaged in meaningful work, the stressful nature of their work environment stimulated the development of turnover intentions. This can be detrimental to organisational effectiveness, as turnover intentions may lead to turnover behaviour or other types of withdrawal behaviour (Chang, Wang & Huang, 2013), and even organisational deviance behaviour (Christian & Ellis, 2013).

Tan (2008) states that turnover intention trends are especially problematic in financial services, IT, engineering and education industries. The Talent Edge 2020 survey (Deloitte, 2011) confirmed that FSI's risk of losing human capital is particularly high. These results are compounded by the demographic profile of employees employed by audit firms operating in the South African FSI. The majority of newly appointed employees in audit firms are Millennial, university graduates (age 31 and younger) starting a three-year apprenticeship (low tenure).

Younger employees are more prone to develop turnover intentions (Chiu & Francesco, 2003; Jacobs, 2005). Numerous research studies conducted in diverse occupational settings and countries confirm this notion (e.g. Beecroft, Dorey & Wenten, 2008; Chang et al., 2013; Cho & Lewis, 2012; Lehong & Hongguang, 2012; Pitts, Marvel & Fernandez, 2011; Sun, Luo & Fang, 2013). Data collected by the Talent Edge 2020 survey (Deloitte, 2011) revealed that 26 percent of Millennials were planning to leave their organisation in the following 12 months. Of all generational groups, they were the most likely to test the job market and develop turnover cognitions. Generation X (ages 32 to 47; 21 percent) and Baby Boomers (ages 47 to



65; 17 percent) were more likely to stay with their current organisation. In addition, the research findings highlighted the negative relationship between employee tenure and turnover intention. The longer employees have been appointed within an organisation, the less likely they are to explore alternative employment opportunities. Eighty-five percent of employees with more than five years' tenure planned to stay with their current organisation. As anticipated, 34 percent of employees who have been employed for only two years or less indicated that they did not plan to stay with their employer longer than the next 12 months (Deloitte, 2011).

Employee disengagement is an equally disconcerting global trend across all industries. The Towers Perrin Global Workforce Report (2007 - 2008) indicated that 38 percent of 90 000 respondents globally were disengaged from their work. The State of the American Workplace Report (Gallup, 2013) reiterated the problematic nature of employee engagement. Seventy percent of American employees are not engaged in their work. They are less productive because they feel emotionally disconnected from their job. According to Coetzee and De Villiers (2010), the increasingly competitive nature of the contemporary FSI negatively affects employee engagement across the globe. Modern Survey's (2010) Work Engagement Index indicates that disengagement among employees in the American FSI rose from 11 percent in 2009 to 29 percent in 2010. Surprisingly, research conducted by Kock (2010) indicated that 76 percent of 767 South African respondents in the FSI were engaged in their work. Nonetheless, this author still encourages organisations to nurture employee engagement.

An alarmingly low number of South African organisations have managed to develop holistic engagement or retention strategies (Manyonga, 2013, as cited in Frase, 2013). Firms in the South African FSI are no different. They concentrate on the replacement of existing staff as needed. Although this might have been an appropriate strategy in managing the after-effects of the global recession, it is no longer suitable, as there are more employment opportunities available in the job market. As a result, employees who are not engaged in their work are more likely to seek alternative employment when faced with a reduction of benefits, poor bonuses and low salary increases. Without making the necessary modifications to their business strategies, employers run the risk of losing valuable human capital. The improving economic outlook compels the nurturing of employee engagement by firms in the South African FSI. According to Ndivhuwo Manyonga, deputy CEO of Aon Hewitt in South Africa, "companies that make a concerted effort to engage with and listen to their employees

will benefit from improved staff retention and better business performance” (Frase, 2013, p. 7).

## **1.2. RESEARCH PROBLEM**

The rationale of the FSI is to cultivate economic growth, capitalise on business opportunities, respond productively to economic and fiscal challenges, and support the creation of a sustainable and prosperous society. It is committed to adding value to its clients by enhancing productivity and quality, while adhering to government regulations. As mentioned previously, audit firms help ensure that organisations trade financially fairly, and that the accounts presented to the public or shareholders are accurate and supported. Considering the central role audit firms fulfil in the South African FSI, it is important that they function optimally.

Employees are the heart, brain and muscle of an organisation (Meyer & Allen, 1997). The optimal functioning of audit firms can only be realised by a healthy and fully functional workforce. Proper management of human resources is the prime driving force behind organisational success (Bohlander & Snell, 2009). In order to deliver the right business results, audit firms must retain employees who are motivated to invest themselves wholly in their work.

To be able to achieve the ideals of worker engagement and no intention to quit, the antecedents of turnover intention and employee engagement among employees employed by audit firms operating in the South African FSI need to be considered and investigated.

## **1.3. RESEARCH INITIATING QUESTION**

“What are the antecedents of variance in turnover intention and employee engagement among employees employed by audit firms operating in the South African FSI?”

## **1.4. OBJECTIVE OF THE STUDY**

The main objective of this research study was to develop and empirically test a structural model that explains the antecedents of variance in turnover intention and employee engagement among employees employed by audit firms operating in the South African FSI.

This research study aimed to:

- Determine the level of turnover intention and employee engagement among employees employed by a sample of audit firms operating in the South African FSI;

- Identify the most salient antecedents of variance in turnover intention and employee engagement among employees employed by a sample of audit firms operating in the South African FSI;
- Propose and test an explanatory turnover intention and employee engagement structural model; and
- Highlight the managerial implications of the research findings and recommend practical interventions to decrease turnover intention and enhance employee engagement among employees employed by audit firms operating in the South African FSI.

### **1.5. RESEARCH METHODOLOGY**

Firstly, an in-depth literature review was conducted to satisfy the theoretical objective of identifying the salient antecedents of turnover intention and employee engagement. Secondly, an empirical, exploratory research study was conducted. Quantitative data was gathered by a self-administered web-based survey. This data was used to test specific hypotheses derived from the literature.

Three well-known audit firms operating in the South African FSI participated in this research study. The firms, with regional offices located across South Africa, are each part of international financial services providers. Since confidentiality was assured, the names of these audit firms will not be revealed.

Purposive (judgement) sampling was used to select the participating audit firms. This method of sampling was selected as it enabled the researcher to use her own judgment in selecting candidates. In doing so, the researcher could select candidates to answer the research questions who meet specified research objectives.

A total of 391 participants completed the self-administered web-based survey. Participation was voluntary. The survey was distributed electronically to the audit interns and audit managers of the participating audit firms. Participants were given three weeks to complete the survey. Based on the results of the pilot study, the survey took approximately five to eight minutes to complete. The data collected was kept strictly confidential and anonymous.

The survey comprised seven sections. Section one and two gathered biographical and employment information. The subsequent five sections were made up of valid and reliable measures used to measure specified latent variables. The measuring instruments were the Turnover Intention Scale (Moore, 2000), the Utrecht Work Engagement Scale (UWES-9)

(Schaufeli et al., 2006), the Psychological Meaningfulness Scale (May et al., 2004), the Job Crafting Scale (Tims et al., 2012), and the six-item Proactive Personality Scale (Claes et al., 2005). Data was subjected to a range of statistical analyses.

With reference to the research findings, managerial implications were highlighted and practical inventions were suggested. In addition, the limitations of the research study and recommendations for future research endeavours were outlined.

## **1.6. DELIMITATIONS**

The primary objective of this research study was to explore the antecedents of variance in turnover intention and employee engagement among employees employed by audit firms operating in the South African FSI. The Job Demands-Resources (JD-R) model (Demerouti, Bakker, Nachreiner & Schaufeli, 2001) was used to explain two outcomes of the stress process, namely turnover intention and employee disengagement.

In general, positive psychology has not been popular in psychology research. Based on an electronic search of psychological abstracts, Schaufeli and Bakker (2004) calculated that negative emotions outweigh positive emotions by 14 to one. Similar results were found for occupational health psychology, where negative work-related outcomes outnumber positive work outcomes by 15 to one. Only more recently have scholars begun to focus on human strengths and optimal functioning. In keeping with this, the current research study did not adhere to the traditional paradigm that highlights weaknesses and malfunctioning, but rather followed the positive psychology approach, emphasising health and well-being in the workplace. Job demands, included in the JD-R model, fall outside the parameters of this research study. The buffering effect of job resources (meaningful work) and personal resources (proactive personality) against the negative effects of job stress are highlighted.

## **1.7. OUTLINE OF RESEARCH STUDY**

Chapter 1 provides an overview of employment within the South African FSI, with specific reference to audit firms operating in this industry. This is followed by a discussion of the problematic nature of turnover intention and the lack of employee engagement in the South African FSI. This was followed by a clarification of the rationale for the study, the research problem and objectives were outlined, and the delimitations discussed.

Chapter 2 comprises an in-depth literature review to satisfy the theoretical objective of the study. Each of the latent variables of interest is defined, explained and discussed in terms of existing academic literature. The relationships between these variables of interest are

explored, and a theoretical model is developed to graphically portray the theorised relationships.

In Chapter 3 the methodology of this empirical, exploratory research study is presented. This includes a discussion of the research design, the research participants, the measuring instruments, ethical considerations, missing values and statistical analyses. Furthermore, the substantive research hypothesis is outlined and the structural model is presented in LISREL notation.

The results derived from the statistical analyses are reported and discussed in Chapter 4. The reporting of the results is done in the following order: item analysis, confirmatory factor analysis (CFA), parameter estimation, structural equation modelling (SEM) and partial least squares (PLS) path modelling. The varying levels of turnover intention and employee engagement across employees employed by audit firms operating in the South African FSI are reported and compared.

Lastly, managerial implications are highlighted in Chapter 5 and practical interventions are discussed. In addition, the limitations of this research study and recommendations for future research endeavours are outlined.

## 1.8. GLOSSARY

**Audit firm:** An audit firm is a firm of auditors who provide auditing and accounting services at a fee.

**Auditors:** Auditors are independent specialists who review the accounts of establishments to ensure the validity and legality of their reported financial records (O\*NET, 2011).

**Financial services industry:** The financial services industry (FSI) is made up of firms that are involved in wide variety of business activities (e.g. investing, lending, insurance, securities trading and securities issuance). In South Africa, FSI firms can form part of the Banking, Insurance, Securities Brokerage (or Financial Advisory Services), Investment Banking, Securities Trading, Investment Management (or Money Management), Securities Analysis, Financial Planning, or Johannesburg Stock Exchange (JSE) business line (Kolakowski, 2013).

**Employee engagement:** Employee engagement, a key factor related to positive employee well-being, is defined as “a positive, fulfilling work-related state of mind characterised by vigour, dedication and absorption” (Schaufeli, Salanova, González-Romá & Bakker, 2002, p. 74).

- **Absorption:** Absorption speaks of a complete captivation with work. It refers to being fully concentrated on work, to the extent that employees find it difficult to disengage from their work after completing tasks.
- **Dedication:** Dedication signifies a strong sense of identification and involvement with work. Dedicated employees perceive their work as a significant and meaningful pursuit. They exhibit feelings of enthusiasm, inspiration, pride and challenge.
- **Vigour:** Vigour is the willingness to devote time and effort to work. It is characterised by high levels of energy and mental resilience, despite failure or challenging tasks (Bakker, Van Emmerik & Van Riet, 2008; Goel, Gupta & Rastogi, 2013).

**Job crafting:** Job crafting denotes a resourceful and unplanned process. It captures how employees locally modify their jobs to create and sustain a viable definition of the work they do and who they are at work (Wrzesniewski & Dutton, 2001). It is the proactive, self-initiated changes employees make to optimise the attainment of personal (work) goals, and to align jobs with their own passions, preferences and motives, from the bottom up (Berg & Dutton, 2008; Berg, Wrzesniewski & Dutton, 2010). According to Wrzesniewski and Dutton (2001), there are three types of job crafting, namely task crafting, relational crafting, and cognitive crafting:

- **Task crafting:** Task crafting refers to job-crafting behaviours that modify employees' job characteristics.
- **Relational crafting:** Relational crafting involves job-crafting behaviours that change the relational architecture of jobs.
- **Cognitive crafting:** Cognitive crafting implies the cognitive or psychologically modification of work.

**Job Demands-Resources (JD-R) model:** The JD-R model suggests that employee well-being and effectiveness are influenced by two sets of working conditions (viz. job demands and job resources) (Hakanen, Perhoniemi & Bakker, 2013; Hu, Schaufeli & Taris, 2013; Menguc, Auh, Fisher & Haddad, 2012). In terms of these conditions, this heuristic model captures each work environments' set of unique characteristics (Tims & Bakker, 2010).

**Job demands:** Job demands refer to working conditions that have the potential to evoke strain when they exceed employees' adaptive capability (Bakker, Hakanen, Demerouti &

Xanthopoulou, 2007; Rothmann, Mostert & Strydom, 2006). It signifies the physical, psychological, social and organisational job features that require sustained physical and psychological effort and skill (Petrouti, Demerouti, Peeters, Schaufeli & Hetland, 2012). Previous research endeavours highlight the physiological and psychological costs associated with job demands (Akkermans, Schaufeli, Brenninkmeijer & Blonk, 2013; Brauchli, Schaufeli, Jenny, Fülleman & Bauer, 2013).

**Job resources:** Job resources concern the degree to which employees are given adequate resources to perform their tasks and duties (Bakker & Demerouti, 2007; Chughtai & Buckley, 2008). They represent the physical, psychological, social and organisational job features that are instrumental in goal achievement, the reduction of job demands, as well as the physiological and psychological costs associated with job demands (Brauchli et al., 2013; Brough et al., 2013), and the stimulation of personal growth and development (Petrouti et al., 2012; Rothmann et al., 2006).

**Meaningful work:** Meaningful work is a psychological state related to a set of general beliefs employees hold about the work assigned to them (Rosso, Dekas & Wrzesniewski, 2010; Sverko & Vizek-Vidovic, 1995). It involves the inter-relationship between the internal world of the individual and the external context of the work environment (Cartwright & Holmes, 2006). Measured by employees' own value systems (Renn & Vandenberg, 1995), it denotes work they perceive to be generally significant, valuable and worthwhile (Michaelson, 2010a, 2010b; Moriarty, 2009).

**Turnover:** Turnover behaviour<sup>1</sup> signifies employees' voluntary movement across the membership boundary of organisations. It denotes employees' decisions to depart from their organisation despite having the opportunity to stay (Mossholder, Settoon & Henagan, 2005). Martin and Roodt (2008) explain that it is a multistage process that includes attitudinal, decisional and behavioural components. The formula presented is used to calculate the annual turnover rate of organisations:

---

<sup>1</sup> In this research study references made to turnover denotes voluntary turnover behaviour.

Leavers in year

x 100

---

Average number of employees during year

**Turnover intention:** Turnover intention (intention to quit), the final sequence of withdrawal cognitions in the turnover process, denotes the probability that employees will quit their job in the foreseeable future (Perez, 2008). Although all turnover intentions may not lead to actual turnover behaviour, employees' intention to leave represents an important outcome variable (Chang et al., 2013). Research has consistently shown that it is the most powerful predictor of actual turnover behaviour (e.g. Bluedorn, 1982; Firth, Mellor, Moore & Loquet, 2004; Griffeth, Hom, Gaertner, 2000; Hom, Caranikas-Walker, Prussia & Griffeth, 1992; Van Breukelen, Van der Vlist & Steensmaet, 2004; Mobley, Horner & Hollingworth, 1978; Steel & Ovalle, 1984).

**Personal resources:** Personal resources are an important extension of the JD-R model. They denote positive self-evaluations linked to resilience (e.g. self-efficacy, organisational-based self-esteem, and optimism) (Akkermans et al., 2013; Xanthopoulou, Bakker, Demerouti & Schaufeli (2007). According to Hobfoll, Johnson, Ennis and Jackson (2003), personal resources refer to employees' beliefs in their ability to control and have an impact on their environment successfully. Statistical analyses indicate that these resources partly mediate the relationship between job resources and work engagement (Xanthopoulou et al., 2007).

**Proactive personality:** Individuals with proactive personalities exercise influence on their (work) environment (Bandura, 1986; Bowers, 1973; Crant, 2000). These individuals do not receive their environmental demands passively. Relatively unconstrained by situational factors (Yousaf, Sanders & Shipton, 2013), they take action to effect environmental change and challenge the status quo (Morrison & Milliken, 2000).



## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1. JOB DEMANDS-RESOURCES MODEL**

The Job Demands-Resources model (JD-R model) is a conceptual framework that can be applied in all occupational settings (Balducci, Fraccaroli & Schaufeli, 2011). Although each occupation has their own set of work characteristics, this model suggests that employee well-being and effectiveness are influenced by two sets of working conditions, namely job demands and job resources (Hakanen et al., 2013; Hu et al., 2013; Menguc et al., 2012). In terms of these conditions, this heuristic model captures each work environments' unique set of potentially damaging job characteristics, as well as its protective factors (Bakker & Demerouti, 2006; Tims & Bakker, 2010). Numerous studies undertaken in different organisational settings and countries have successfully adopted this model (e.g. Bakker, Demerouti & Euwema, 2005; Llorens, Bakker, Schaufeli & Salanova, 2006).

Job resources concern the extent to which employees are given adequate resources to perform their tasks and duties (Bakker & Demerouti, 2007; Chughtai & Buckley, 2008). They represent the physical, psychological, social and organisational job features that are instrumental in goal achievement and the reduction of job demands, as well as their physiological and psychological costs (Brauchli et al., 2013; Brough et al., 2013), and the stimulation of personal growth and development (Petrou et al., 2012; Rothmann et al., 2006). Job resources can be found at an organisational level (e.g. equitable pay, job security, continuous learning, and advancement opportunities), an interpersonal level (e.g. supervisor-employee relations, teamwork, and feedback from others), a task level (e.g. challenging work, task significance, task and skill variety, and feedback from the job), and at the level of work organisation (e.g. work-role definitions and autonomy) (Bakker & Demerouti, 2007; Brauchli et al., 2013).

In contrast, job demands (e.g. substantial workload, work pressure, poor environmental conditions, and emotionally taxing interactions) (Zapf, Vogt, Seifert, Mertini & Isic, 1999) refer to working conditions that have the potential to evoke strain when they exceed employees' adaptive capability (Bakker et al., 2007). They signify the physical, psychological, social and organisational job features that require sustained physical and psychological effort and skill (Petrou et al., 2012). Previous research endeavours have highlighted the physiological and psychological costs associated with job demands

(Akkermans et al., 2013; Brauchli et al., 2013). In comparison with Karasek's Demands-Control Model, the JD-R model includes a broader range of job demands (Bakker, Demerouti & Schaufeli, 2003).

Even though various scholars have argued that personal resources are important determinants of employees' adaption to their work environments (Hobfoll, 1989; Judge, Locke & Durham, 1997) it is only in the last decade that these personal resources were added to the existing JD-R model. This important extension denotes positive self-evaluations linked to resilience (Akkermans et al., 2013). They refer to employees' belief in their ability to successfully control and have an impact on their environment (Hobfoll et al., 2003). According to Xanthopoulou et al. (2007), personal resources include self-efficacy, organisational-based self-esteem and optimism.

The JD-R model highlights the interaction effects between job demands and job strain, and between job resources and work motivation. These two substantially independent psychological processes are known as the health impairment process and the motivational process (Bakker & Demerouti, 2013; Balducci et al., 2011). The health impairment process (effort-driven process) refers to mental and physical exhaustion associated with poorly designed jobs or chronic job demands (Brough et al., 2013; Petrou et al., 2012). It requires that employees exert themselves more to maintain job performance while managing job demands. In these instances, burnout mediates the interaction effect between job demands and negative (health) outcomes (Chughtai & Buckley, 2008). In addition to the health problems (physical and psychological) and energy depletion (Jackson & Rothmann, 2006) this psychological process leads to repetitive strain injury, sickness and absenteeism (Brauchli et al., 2013; Peterson, Demerouti, Bergström, Åsberg & Nygren, 2008).

The motivational process (motivation-driven process) suggests that job resources possess motivational potential (Schaufeli & Taris, 2013, as cited in Hu et al., 2013). This process enhances work engagement, decreases cynicism, and inspires superior work performance (Akkermans et al., 2013; Bakker & Schaufeli, 2008; Hakanen, Bakker & Demerouti, 2005; Richardsen, Burke & Martinussen, 2006). Other positive outcomes associated with job resources include organisational commitment (Brauchli et al., 2013; Brough et al., 2013), extra-role behaviour (Bakker, Demerouti & Verbeke, 2004), organisational connectedness (Lewig, Xanthopoulou, Bakker, Dollard & Metzger, 2007), and client satisfaction (Salanova, Agut & Peiró, 2005).

Both these processes are supported by robust empirical research (e.g. Bakker & Demerouti, 2007; De Lange, De Witte & Notelaers, 2008; Hakanen, Bakker & Schaufeli, 2006; Hakanen, Schaufeli & Ahola, 2008; Lewig et al., 2007; Llorens, Schaufeli, Bakker & Salanova, 2007; Schaufeli, Bakker & Van Rhenen, 2009). Early cross-sectional research conducted by Schaufeli and Bakker (2004) tested the JD-R model on four diverse samples of employees in the service sector. They found that job demands correlated positively with burnout, which in turn led to the psychosomatic complaints hypothesised by the health impairment process. Conversely, job resources positively affected work engagement, which in turn negatively predicted the turnover intention hypothesised by the motivational process. These results were replicated in longitudinal studies.

Most notably, the JD-R model has been found to be empirically sound across a spectrum of professions, ranging from highly skilled employees (e.g. dentists, managers, police officers and teachers) to low-skilled service and production employees (e.g. call-centre agents, fast food employees, hotel personnel and temporary agency employees) (Bakker, Demerouti, De Boer & Schaufeli, 2003). Moreover, the generalisability of the JD-R model has been confirmed by research findings obtained from heterogeneous sample groups and comparative studies conducted among blue and white collar employees. According to Van den Broeck (2010), recent research indicated that the JD-R model is invariant across age, gender (Korunka, Kubicek, Schaufeli & Hoonakker, 2009) and countries (Hakanen, Perhoniemi & Toppinen-Tanner, 2008; Llorens et al., 2006).

Given the empirical evidence in support of this model, it seems probable that the basic processes it reflects will be portrayed in employees employed by audit firms operating in the South African FSI. Therefore this model, depicted in Figure 2.1, was utilised as the conceptual framework for the study. It also served as a yardstick for the prioritisation of antecedents of turnover intention and employee engagement.

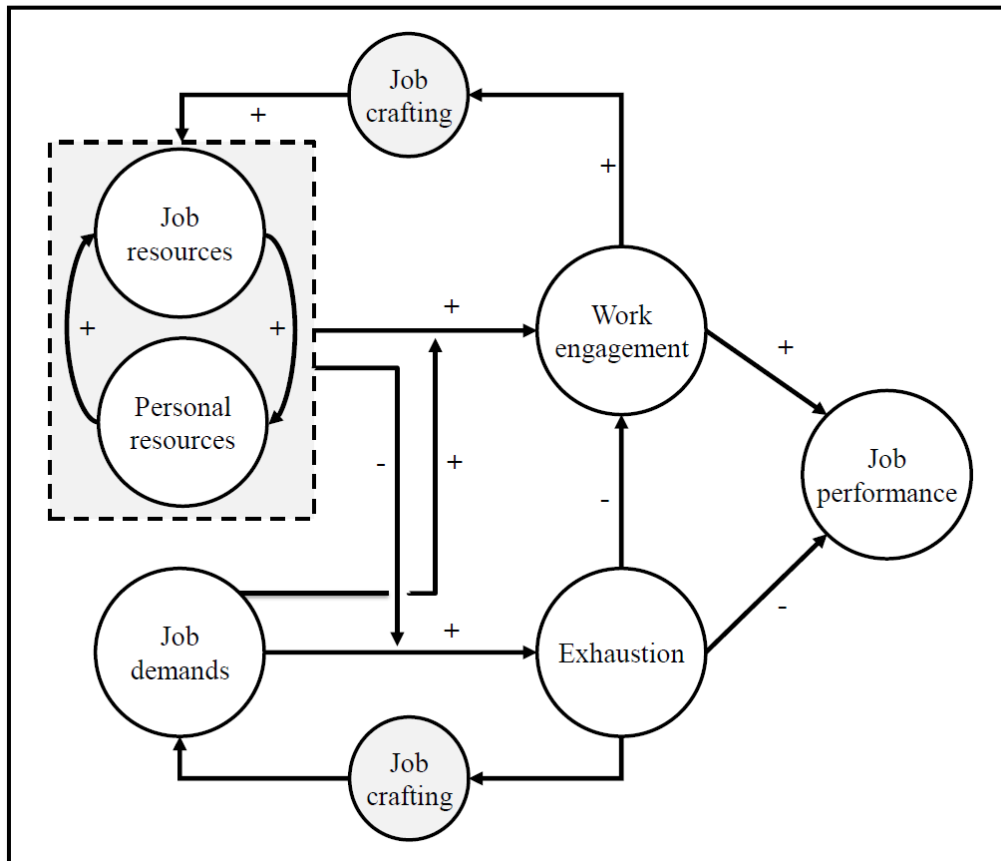


Figure 2.1. The Job Demands–Resources model

(Bakker & Demerouti, 2012)

## 2.2. LATENT VARIABLES OF INTEREST

### 2.2.1. Turnover intention

Turnover behaviour signifies employees' voluntary movement across the membership boundary of organisations. It denotes employees' decision to depart from their organisation despite having the opportunity to stay (Mossholder et al., 2005). This multistage process includes attitudinal, decisional and behavioural components (Martin & Roodt, 2008). Described as the last sequence of withdrawal cognitions in the turnover process, turnover intention (intention to quit) denotes employees' probability to quit their job in the foreseeable future (Perez, 2008). Although all turnover intentions may not lead to actual turnover

behaviour, employees' intention to leave represents an important outcome variable (Chang et al., 2013).

According to Ajzen (1991), behavioural intention and actual behaviour are highly correlated. In agreement with this, research has consistently shown that turnover intention is the most powerful predictor of actual turnover behaviour (e.g. Bluedorn, 1982; Firth et al., 2004; Griffet et al., 2000; Hom et al., 1992; Van Breukelen et al., 2004; Mobley et al., 1978; Steel & Ovalle, 1984). Considering that turnover intention accounts for approximately nine to 25 percent of actual turnover behaviours (Dalton, Johnson & Daily, 1999) it is imperative that employers are cognisant of salient variables that encourage the development of turnover intentions.

For decades, scholars have studied turnover cognitions in an attempt to uncover these salient variables (e.g. Bluedorn, 1982; Kalliath and Beck, 2001; Chang et al., 2013; Hom et al., 1992; Lee & Mitchell, 1994, as cited in Regts & Molleman, 2013; Mitchell, Holtom, Lee, Sablinski & Erez, 2001; Wright & Bonett, 2007). Regrettably, the majority of research findings have proven to be unreliable. The inconsistent nature of data can be attributed to the heterogeneity of populations, the diversity of the constructs under investigation, and inconsistencies in the measuring instruments used. Nonetheless, scholars have reported significant correlations with selected variables (e.g. job stress, job stressors<sup>2</sup>, low organisational commitment, and job dissatisfaction) (Greenhaus & Beutell, 1985, Igbaria & Greenhaus, 1992 and Rahim & Psenicka, 1996, as cited in Tumwesigye, 2010). In the African context, research findings have drawn attention to trust in management, supervisory support, employee participation, and autonomy (Gbadamosi, Ndaba & Oni, 2007). However, the literature does not report any research study that has managed to determine which variables contribute to the development of turnover intention among employees employed by audit firms operating in the South African FSI.

#### **2.2.1.1. The importance of employee retention**

Retaining talented employees is imperative for the performance and overall success of organisations (Glebbeck & Bax, 2004, as cited in Flint, Haley & McNally, 2013; Holtom,

---

<sup>2</sup> Job stressors denote job-related factors that employees experience as stressful.

Mitchell, Lee & Eberly, 2008). There are countless reasons why voluntary turnover can have detrimental consequences in any organisational context. According to Colema (1987), turnover has traditionally been perceived negatively because of the significant expenses incurred when employees leave organisations. This situation remains unchanged in modern organisations. Each time employees are replaced, organisations incur direct and indirect expenses (e.g. advertising, headhunting fees, human resource costs, loss of productivity, new hire training, and customer retention). The SHRM Foundation Report (2008, as cited in Fox, 2012) estimated the cost of hiring a new employee at 60 percent of the employee's annual salary. According to other approximations, the total cost of replacing a single employee can range from 30 percent to 200 percent of their annual wage, depending on the industry and job role (Beam, 2009).

Employee retention theory and recent research stress the loss of human capital (general and specific) associated with turnover. While general human capital can be transferred across jobs, specific human capital involves formal training and tacit knowledge that is unique to a particular setting, and is less transferable. It implies a mutual investment by the employee and the organisation. Employees' specific human capital varies depending on their tenure. Retaining employees who possess critical implicit knowledge and have a long tenure is particularly valuable (Holtom, et al., 2008). Another concern associated with turnover is operational disruptions (Colema, 1987). When employees function as part of a team (interdependent), turnover behaviour may hamper the remaining employees' ability to complete tasks and fulfil duties. Lastly, turnover negatively affects employee morale (Colema, 1987). Staw (1980) confirms the damaging impact that turnover has on the attitudes of the remaining employees.

Considering the aforementioned, the conclusion can be drawn that employee retention influences organisational success (both directly and indirectly). To avoid the negative consequences associated with turnover behaviour following the development of turnover intentions, organisations should take reasonable action to ensure that existing employees are retained and turnover intentions are restricted. Therefore, this study investigated the prevalence of turnover intentions among employees employed by audit firms operating in the South African FSI.

### **2.2.2. Employee engagement**

Employee engagement is frequently mentioned in the organisational behaviour literature. There are two general conceptualisations of this construct. Firstly, employee engagement

represents the direct opposite of burnout. It is characterised by energy, involvement and efficacy (Bakker & Demerouti, 2007). As empirically measured by the Maslach Burnout Inventory-General Survey (MBI-GS) (Maslach, Schaufeli & Leiter, 2001), this conceptualisation of engagement is associated with the absence of exhaustion and cynicism, and the presence of professional efficacy (Bakker, Tims & Derks, 2012).

Alternatively, Schaufeli et al. (2002) argue that employee engagement and burnout are two distinct, albeit negatively correlated, mental states. According to these authors, employee engagement and burnout do not represent the two opposing ends of a single continuum. Instead, as measured by the Utrecht Work Engagement Scale (UWES) (Schaufeli et al., 2002; Schaufeli, Taris & Rhenen, 2008), employee engagement represents a positive antipode for workplace burnout. Defined as “a positive, fulfilling work-related state of mind characterised by vigour, dedication and absorption”, employee engagement represents a key component of positive employee well-being (Schaufeli et al., p. 74).

In this research study, employee engagement was defined in agreement with the definition of Schaufeli and his colleagues (2002). There were four reasons for this decision:

- Employee engagement and burnout are conceptualised as independent, equally important concepts;
- Affective and cognitive aspects of employee engagement are taken into consideration. This implies that employee engagement involves cognitions, emotions and feelings (Salanova & Schaufeli, 2008);
- Employee engagement comprises three dimensions, namely vigour, dedication and absorption. The strengths and deficiencies of each dimension can be detected with superior accuracy; and
- The aforementioned dimensions of employee engagement can be measured with a valid and reliable psychometric questionnaire (e.g. UWES-9) (Schaufeli et al., 2006).

#### **2.2.2.1. The importance of employee engagement**

The positive outcomes associated with employee engagement have been the driving force of various research endeavours. Engaged employees are characterised by absorption, dedication and vigour, and are considered valuable organisational assets. Firstly, these employees are completely activated by and engrossed in their work. They often have difficulty disengaging themselves from their work after completing their tasks (Bakker & Demerouti, 2008). Secondly, the perceived meaningfulness of and strong identification with work nurture

feelings of enthusiasm, inspiration and pride (Chughtai & Buckley, 2008). Lastly, these employees are more willing to devote time and effort to their work, and display high levels of energy and mental resilience despite failure or challenging tasks (Bakker et al., 2008). Instead of becoming exhausted by the demanding nature of their work, engaged employees display higher levels of energy and self-efficacy. They are able to derive benefits from stressful work situations (Sonnentag, 2003). This safeguards them against the development of turnover intentions.

An early meta-analysis conducted by Harter, Schmidt and Hayes (2002) reported that employee engagement is positively associated with customer satisfaction, customer loyalty, productivity and profitability, and negatively associated with employee turnover. Subsequent reviews of employee engagement literature concluded that employee engagement is related to positive employee attitudes, proactive job behaviours, higher levels of employee psychological well-being, and increased individual job and organisational performance (Demerouti & Cropanzano, 2010; Schaufeli & Salanova, 2008). Employee engagement stimulates positive job-related attitudes, employee health, extra-role behaviours, and organisational commitment (Schaufeli & Bakker, 2010).

Recent research published by Social Knows: Employee Engagement Statistics (Lupfer, 2011) revealed that:

- The lost productivity of actively disengaged employees costs the US economy \$370 billion annually (Gallup).
- In February, June and October of 2010, more employees voluntarily quit their jobs than those who were fired or discharged (US Bureau of Labor Statistics).
- Seventy percent of engaged employees indicated that they have a good understanding of how to meet customer needs, compared to 17 percent of employees who are not engaged in their work (Wright Management).
- Seventy-eight percent of engaged employees indicated that they would recommend their company's products or services. Only 13 percent of disengaged employees reported this (Gallup).
- Sixty-seven percent of engaged employees promote their company or organisation, compared to three percent of employees who are not engaged in their work (Gallup).



- The Corporate Leadership Council found that more than 80 percent of senior human resources (HR) professionals, in a global sample of 60 corporations, agreed that employee engagement was a high priority for 2009. In addition, 40 percent of these managers stated that employee engagement had become more of a priority over the last year.
- Eighty-six percent of engaged employees reported that they frequently felt happy at work. Only 11 percent of disengaged employees reported this (Gallup).
- Forty-five percent of engaged employees indicated that their work provided them with a great deal of happiness in their life, compared to eight percent of employees who were not engaged in their work (Gallup).
- Less than 50 percent of chief financial officers appeared to understand the return on their investments in human capital (Accenture).
- Even though 90 percent of managers' were aware of the fact that employee engagement has an impact on business success, 75 percent of leaders had no engagement plan or strategy (ACCOR).

With reference to the statistics mentioned before, organisations should necessarily cultivate a sense of engagement in their employees. This will ensure that employees are inspired, enthusiastic, empowered and confident, which in turn bolsters organisational effectiveness and prosperity. In the light of the importance of employee engagement, this study investigated the extent to which employees employed by audit firms operating in the South African FSI are engaged in their work.

### **2.2.3. Job crafting**

For decades, organisational researchers have been studying job design variables that influence employees' job experience. Historically, the emphasis fell on top-down processes, looking at the way management design jobs for their employees (Campion & McClelland, 1993; Hackman & Oldham, 1980). Researchers either considered how work itself (e.g. Griffen, 1987, as cited in Wrzesniewski, LoBuglio, Dutton & Berg, 2013; Hackman & Oldham, 1980), or individual determinants (e.g. Dubin, 1956, Lodahl & Kejner, 1965 and Roberson, 1990, as cited in Wrzesniewski, Dutton & Debebe, 2001), affect employees' job experience. Although distinct, both these perspectives minimise employees' role in crafting their own jobs.

More recently, scholars have begun to call attention to employees' job-crafting efforts that are used to create jobs that satisfy their personal needs (Tims, Bakker, Derks & Van Rhenen, 2013b). They found that "even in the most restricted and routine jobs, employees can exert some influence on what is the essence of the work" (Wrzesniewski & Dutton, 2001, p. 179). At virtually any level in an organisation, employees can make unplanned, unsupervised changes to their jobs (Amabile, Hill, Hennessey & Tighe, 1994; Berg et al., 2010; Ilgen & Hollenbeck, 1992; Wrzesniewski et al., 2013).

Today, job crafting is omnipresent and important in all organisations. Van den Heuvel, Demerouti, Bakker and Schaufeli (2010) advocate that job crafting is a competitive advantage in the ever-changing world of work. Although the term was first coined by Wrzesniewski et al. (2001), job crafting was already mentioned more than two decades earlier by Kulik, Oldham and Hackman (1987). These authors define it as proactive, self-initiated changes employees make to optimise the attainment of personal (work) goals and align jobs with their own passions, preferences and motives, from the bottom up (Berg & Dutton, 2008; Berg et al., 2010). In agreement with this, Wrzesniewski et al. (2001, p. 180) explain that "job crafting is a creative and improvised process that captures how individuals locally adapt their jobs in ways that create and sustain a viable definition of the work they do and who they are at work".

Job crafting does not necessarily involve the complete redesign of a job, but signifies changing particular features of the job in either radical or incremental ways (Wrzesniewski & Dutton, 2001). Along with tasks and duties, social relationships at work are the raw materials (Berg et al., 2010) that employees use to physically, cognitively and relationally modify their jobs (Ilgen & Hollenbeck, 1992). It is in this way that they become 'job crafters' who proactively take control of their work situation to cause change, or act upon prospective situations (Griffin, Neal & Parker, 2007; Parker & Collins, 2010). They shape, redefine and mould the various features of their work environment (Tausky, 1995).

Despite the fact that some scholars regard job crafting as a clandestine attempt to undermine existing management systems, it does not devalue management's role in redesigning jobs. Management still has the ability to influence employees' job design (Nielsen, Randall, Yarker & Brenner, 2008). Job crafting theory simply highlights employees' contribution to the design process. Regrettably, irrespective of the positive outcomes associated with job crafting, most managers react negatively to employees' initiatives. They perceive these as a challenge to their authority, and not as personal initiatives aimed at nurturing continuous

improvement. Thankfully, there are others who encourage job crafting, on the condition that the outcome must affect the critical stakeholders positively (Staw & Boettger, 1990). These managers realise that, when enacted properly, job crafting can improve the lives of employees (Berg, Dutton & Wrzesniewski, 2007) and benefit the organisation at large (Berg et al., 2010; Crant, 2000; Parker, 2000; Petrou et al., 2012).

#### **2.2.3.1. Job crafting in terms of the JD-R model**

Tims and Bakker (2010) define job crafting as modifications employees make to restore the balance between their job resources and job demands, and their personal needs and abilities. Based on this conceptualisation, they propose that the JD-R model can be used to measure job crafting. Not only is this model far more flexible and rigorous than previous job design models (e.g. the Job Characteristics model of Hackman & Oldham, 1975, 1988, and the Demand–Control model of Karasek & Theorell, 1990, as cited in Panatik, 2012), but it also helps management to identify the particular features of job design that employees wish to change (Bakker et al., 2012; Tims, Bakker & Derks, 2013a). In other words, employees' job-crafting behaviours (i.e. task crafting and relational crafting) can be described in terms of job resources and job demands (Petrou et al., 2012). However, before it can be used to measure job crafting, it is necessary to frame relevant crafting behaviours in terms of the JD-R model.

In terms of the JD-R model, Tims et al. (2012) distinguished empirically between four job-crafting dimensions, namely increasing social job resources (e.g. social support and feedback), increasing structural job resources (e.g. autonomy and variety), increasing job demands (e.g. adding additional tasks and duties to their jobs, taking over tasks from their supervisor, and volunteering for group projects they find interesting), and decreasing job demands (e.g. unsuitable materials, role ambiguity, the lack of job security, and presence of role conflict). In general, employees value access to job resources at work. The Conservation of Resources (COR) theory explains that employees can only deal with challenging job demands when they have adequate job resources (Hobfoll, 1989). Unfortunately there are work situations in which there are insufficient job resources. In these instances, Tims and Bakker (2010) advise that mobilising additional job resources may assist employees in coping with job demands.

Although increasing job demands and decreasing job demands are seemingly contradictory, this is not the case. The literature distinguishes between challenging job demands and hindering job demands (Van den Broeck, De Cuyper, De Witte & Vansteenkiste, 2010). When employees have access to sufficient job resources, and feel that their job does not

provide them enough opportunities to utilise their skills, they typically increase the challenging job demands (LePine, Podsakoff & LePine, 2005). These demands (e.g. complex tasks and duties, time pressure and job scope) are correlated positively with favourable work outcomes (e.g. job satisfaction and organisational commitment) (Bakker, Van Emmerik & Euwema, 2006; Sonnentag, 2003). Instead of depleting employees' energy, these demands increase work motivation and goal achievement (Cavanaugh, Boswell, Roehling & Boudreau, 2000).

Conversely, hindering demands enhance work-related stress and lead to negative work outcomes (e.g. job dissatisfaction, job search, negative emotions, voluntary turnover, and withdrawal behaviour) (Schaufeli & Taris, 2005). When job demands exceed employees' capabilities, they decrease hindering demands (e.g. seeking help from colleagues, or decreasing the amount of interactions with demanding customers or colleagues) (LePine et al., 2005). By decreasing these demands, which prohibit them from attaining valued work goals (Cavanaugh et al., 2000) employees are able to stay healthy and satisfied with their work. They can achieve work goals without exerting themselves too much (Petrou et al., 2010).

Framing job crafting in terms of the JD-R model acknowledges the complexity of the job-crafting process. It highlights that employees can utilise job resources and job demands to improve the alignment between jobs and their personal passions, preferences and motives (Berg & Dutton, 2008; Berg et al., 2010). Accordingly, this study framed job crafting in terms of the JD-R model.

#### **2.2.4. Meaningful work**

The study of meaning originated decades ago. According to Adlerian theory, all humans live in the realm of meanings (Alderfer, 1972). They can only experience their reality by attaching meaning to their experiences (meaning-making) (Adler, 1931, 1992, as cited in Watts, 2003). Mezirow (1981, as cited in Le Cornu, 2009, p. 282) explains that "at its simplest meaning-making refers to a lifelong process of understanding the world and our relationships with it". By way of interpreting life experiences, humans make sense of them and spin webs of meaning (Baumeister, 1991, 2010; Neimeyer, 1995). Also referred to as 'meaning systems' (Molden & Dweck, 2006), these shared mental representations of interrelations between things, events and relationships comprise everything humans know (Baumeister, 1991).

Today, employees seek meaning in their work more so than in any other facet of their lives (Holbeche & Springett, 2004; Conger, 1994). They regard their work as a means by which they express purpose in their lives (Hoar & Kirwan-Taylor, 2004, as cited in Martela, 2010). Consequently, the aim of their pursuits becomes more important (Chalofsky & Krishna, 2009). According to Bowie (1998), the provision of meaningful work is no longer utopian, but an economic necessity. Unfortunately, modern organisations often neglect the importance of this job resource (in terms of the JD-R model). “It seems that we need a new vocabulary that casts a new light on work, an effort that is not based on toil, labor, or trade for life’s energies, but rather an activity that in fact adds a dimension of quality and meaning to life” (Hass, 2007, p. 21).

Since the meaningfulness of work differs between diverse groups of people and changes with social and economic conditions, there are countless definitions in circulation (Harrison, 2008; Hasan, 2004). Perspectives range from Marxist ideas that resist the dehumanising influences of the Industrial Revolution, to religious philosophies that advocate that employees are called to work by a transcendent spirit, and everything in between (Steger, 2009). One aspect of work that reconciles the various definitions is the fact that work should constitute a ‘purposeful activity’, encompassing material, social, economic, psychological, psychic and biological dimensions (Brief & Nord, 1990; Haughey, 1989; Morin, 2008). Fryer and Payne (1984), agree that, whether salaried or unsalaried, work is a useful activity, determined by a definite purpose beyond the pleasure engendered by its performance.

The challenges associated with defining work are intensified by having to integrate meaning and work into one construct (meaningful work). Although many researchers have attempted to define meaningful work, they have not yet been able to completely capture the essence of this intricate concept. This can be attributed to the multidimensional and interactive nature of this construct (Hasan, 2004). While commonalities do exist between some mainstream definitions, others differ significantly. Any definition of this concept will undoubtedly be circular (Csikszentmihalyi, 1990). Chalofsky (2003) agrees that meaningful work is an indefinable psychological state and core dimension of psychological well-being (McGregor & Little, 1998; Ryan & Deci, 2001).

In this research study, meaningful work is defined as a psychological state related to a set of general beliefs employees hold about the work assigned to them (Rosso et al., 2010; Sverko & Vizek-Vidovic, 1995). This job resource involves the inter-relationship between the internal world of the individual and the external context of the work environment (Cartwright

& Holmes, 2006). Measured by employees' own value systems (Renn & Vandenberg, 1995), it denotes work they perceive to be generally significant, valuable and worthwhile (Michaelson, 2010a, 2010b; Moriarty, 2009). As explained by Chalofsky (2010) meaningful work provides the essence of what employees do and provides them with a sense of fulfilment.

Deloitte (2013) advises that financial services organisations should nurture perceptions of meaningful work among their employees. Along with the provision of developmental opportunities, challenging work and environmental flexibility, meaningful work is an invaluable job resource that positively affects individual as well as organisational performance. For this reason, this study considered the extent to which employees employed by audit firms operating in the South African FSI perceive their work to be generally significant, valuable and worthwhile.

### **2.2.5. Proactive personality**

All individuals have their own personality (Goldberg, 1993) characterised by a set of distinct personality traits. These traits represent the dimensions along which personalities vary in relatively consistent, stable ways (Bateman & Crant, 1993). According to Barrick, Mount and Li (2013), personality is a distal motivational force that can be used to make generalisations about human nature and explore individual differences. It enables researchers to determine individuals' behavioural responses to a variety of different stimuli or situations (Baron, 2001 and Neil, 2003, as cited in Jansen van Rensburg, 2011).

In modern organisations, proactivity is a valuable personal resource. Research findings have shown that proactive employees<sup>3</sup> exercise influence on their (work) environment (Bandura, 1986; Bowers, 1973; Crant, 2000). These individuals do not passively receive their environmental presses. Relatively unconstrained by situational factors (Yousaf et al., 2013), they take action to effect environmental change and challenge the status quo (Morrison & Milliken, 2000). Crant (2000, p. 439), explain that employees with proactive personalities “identify opportunities and act on them, show initiative, take action, and persevere until meaningful change occurs”. Empowered by their personal initiative these employees can

---

<sup>3</sup> Proactive employees are employees with proactive personality dispositions.

turnaround nearly any negative situation (Bateman & Crant, 1993). This ensures that negative consequences are minimised and valued goals are attained (Crant, 2000; Fryer & Payne, 1984).

Even though it overlaps conceptually with personal initiative (Fay & Fay, 2001, Frese, Fay, Hilburger, Leng & Tag, 1997 and Frese, Kring, Soose & Zempel, 1996, as cited in Claes et al., 2005), this personality disposition is characterised by extraversion, conscientiousness, and the need for achievement and dominance. It is unrelated to openness, neuroticism, agreeableness, external locus of control, mental ability, and response bias (Bateman & Crant, 1993; Crant, 1995). It does not involve individuals' ability to change their current circumstances (proactive behaviour), but describes a stable personality disposition to proactive behavioural responses (Crant, 2000).

Against the backdrop of extreme competitiveness associated with today's business environment, Prabhu (2007, p. 1) explains that "being proactive is a necessity rather than a luxury". Campbell (2000) mentions that there are modern organisations that consider proactivity as a role requirement. These organisations acknowledge that employees who possess this personal resource do not blame their behaviours on circumstances, conditions or conditioning (Covey, 2004, as cited in Prabhu, 2007). Instead, their behavioural responses are a product of conscious decision making, which is beneficial within the workplace. Consequently, this study investigated the prevalence of proactive personalities among employees employed by audit firms operating in the South African FSI.

## **2.3. INTERRELATIONSHIPS AMONG THE LATENT VARIABLES OF INTEREST**

### **2.3.1. Direct relationships among the latent variables of interest**

#### **2.3.1.1. Employee engagement and turnover intention**

Numerous scholars have reported the negative relationship between employee engagement and turnover intention (e.g. Allen, Shore & Griffeth, 2003; Koyuncu, Burke & Fiksenbaum, 2006; Saks, 2006; Wefald, Smith, Savastano & Downey, 2008). As mentioned before, engaged employees are characterised by vigour, dedication and absorption. Their positive emotions and work experiences cultivate organisational commitment. In turn, engaged employees' sense of commitment to their organisation make them less inclined to the development of turnover intentions (Schaufeli & Bakker, 2004). According to Christian and Slaughter (2007, as cited in Rigg, 2013), dedication and vigour (two dimensions of employee engagement) are closely related to organisational commitment. A meta-analysis conducted by



Halbesleben (2010) confirmed this notion. This author reported that the corrected population correlations of engaged employees' turnover intention ranged from  $r = -.25$  (vigour) to  $r = -.45$  (dedication). By implication, engaged employees are less prone to develop turnover intentions.

Hobfoll's Conversion of Resources (COR) theory (2001, as cited in Halbesleben & Wheeler, 2008), explains that employees invest resources in their work environment. Alarcon and Edwards (2011) concur. The loss of resources associated with changing jobs discourages the development of turnover intentions. Instead, engaged employees willingly commit themselves entirely to their work, and have difficulty detaching themselves after tasks have been completed (De Lange, De Witte & Notelaers, 2008). A study conducted among hospital workers supported this notion. Employees who were deeply embedded in their work did not voice turnover intention, but chose to remain loyal to their current employer (Mitchell, et al. 2001). This is also in agreement with the findings of the Towers Perrin European Talent Survey (2004), which showed that 66 percent of highly engaged employees had no plan to quit their current job, compared to 12 percent of disengaged employees. In addition, only three percent of engaged employees were actively seeking alternative employment, in contrast to 31 percent of disengaged employees.

Previous research endeavours have gathered evidence in support of the significant negative impact that employee engagement has on turnover intention. However, this relationship has not been tested among employees employed by audit firms operating in the South African FSI. Nevertheless, there is reason to believe that this hypothesised relationship exists in the latter context. As employees become more engaged in their work, they are less prone to actively seek alternative employment opportunities. These employees' sense of commitment toward and investment in their current organisation discourage the development of turnover intentions.

***Proposition 1:*** Employee engagement has a significant negative impact on turnover intention.

#### **2.3.1.2. Employee engagement and job crafting**

The relationship between job crafting and work engagement is dynamic (Bakker, 2011). Parker and Collins (2010) refer to the positive outcomes of employee engagement. These authors explain that the positive psychological state (positive affect) associated with engaged employees encourages them to take action, think innovatively and identify opportunities within their immediate surroundings. Demerouti and Cropanzano (2010) concur, showing



that these employees are more willing to devote time and effort to work than their counterparts, and hence do not become exhausted by the demanding nature of their work. They display high levels of energy and proactive behavioural responses (Bindl & Parker, 2011; Parker & Griffin, 2011).

Per definition, job crafting denotes “a creative and improvised process that captures how individuals locally adapt their jobs in ways that create and sustain a viable definition of the work they do and who they are at work” (Wrzesniewski & Dutton, 2001, p. 180). To make these proactive, self-initiated changes, employees need to think creatively and recognise numerous opportunities for change within their work environment. They must become the ‘job crafters’ who proactively shape, redefine and mould the various features of their work environment (Ashforth & Kreiner, 1999; Griffin et al., 2007; Tausky, 1995).

Fredrickson (2001) explains that joyful and enthusiastic employees (engaged employees) have more elaborate behavioural repertoires and thinking patterns than their disengaged counterparts. These employees have the ability to integrate diverse ideas and come up with novel solutions, which is characteristic of job crafting. Accordingly, the conclusion can be drawn that employee engagement has a significant positive impact on job crafting. Even though this relationship has not been tested empirically, there is reason to believe that employees employed by audit firms operating in the South African FSI, who are engaged in their work, are more likely to exhibit job-crafting behaviours. Their characteristically high energy levels and proactive behavioural responses encourage job crafting.

***Proposition 2:*** Employee engagement has a significant positive impact on job crafting.

#### **2.3.1.3. Job crafting and employee engagement**

Job crafting represents a practical way in which employees can increase their engagement. A number of job characteristic frameworks (e.g. the JD-R model of Demerouti et al., 2001, and the Job Characteristics model of Hackman & Oldham, 1975, 1988) advocate that job features have an impact on employees’ motivation or job satisfaction (Petrou et al., 2012). Making proactive, self-initiated changes to these features allows employees to shape their job resources and demands in accordance with their personal preferences and needs (Hakanen, et al., 2008). Wrzesniewski et al. (2013) concur and explain that employees’ ability to align their job resources and demands is positively related with employee engagement.

Job resources are commonly associated with employee engagement (Tims et al., 2013a). As illustrated by the JD-R model, the motivational potential of job resources nurtures the

motivational process. One of the positive outcomes associated with the motivational process is employee engagement. A meta-analysis conducted by Halbesleben (2010) shows that employee engagement is determined primarily by the availability of job resources in the work environment. Therefore, job-crafting behaviours aimed at increasing social job resources and structural job resources promote employee engagement.

Job demands are related to employee engagement in positive (Van den Broeck, Vansteenkiste, De Witte & Lens, 2008) and negative ways (Bakker et al., 2007). As mentioned previously, the literature distinguishes between challenging job demands and hindering job demands (Van den Broeck et al., 2010). Challenging job demands promote positive motivational states (Podsakoff, LePine & LePine, 2007) associated with employee engagement. This positive relationship was confirmed in a study conducted among teachers (Prieto, Soria, Martinez & Schaufeli, 2008). Increasing challenging job demands (optimal level of job challenge) motivates employees to become more engaged in their work. In contrast, as illustrated by the JD-R model, hindering job demands activate a health impairment process (Hakanen et al., 2008). The physiological and psychological costs associated with these job demands have a negative effect on employee engagement. Hence, job-crafting behaviours aimed at increasing challenging job demands and decreasing hindering job demands promote employee engagement.

As illustrated, previous research studies have found empirical support in favour of the significant positive impact that job crafting has on employee engagement. However, this relationship has not been tested among employees employed by audit firms operating in the South African FSI. Nevertheless, there is reason to believe that this hypothesised relationship exists in the latter context. As employees are able to improve the alignment between jobs and their personal passions, preferences and motives (through job-crafting behaviours), they become more engaged in their jobs.

***Proposition 3:*** Job crafting has a significant positive impact on employee engagement.

#### **2.3.1.4. Job crafting and turnover intention**

Job satisfaction signifies employees' feelings regarding their work environment (i.e. job, supervisor, work group, organisation and personal fulfilment) (Melnik, 2006, as cited in Kuo, Lin & Li, 2013). George and Jones (2008, as cited in Kuo et al., 2013) explain that job satisfaction affects countless organisational outcomes and behavioural manifestations. In an attempt to avoid unpleasant work situations, dissatisfied employees engage in job withdrawal

behaviour (Hanisch & Hulin, 1990). There are many types of withdrawal behaviours. Turnover intentions are one of them (Carsten & Spector, 1987; Hayne, Gerhardt & Davis, 2009; Hulin, Roznowski & Hachiya, 1985; Tett & Meyer, 1993). Recent studies conducted among Taiwanese nurses (Kuo et al., 2013) and Pakistani nurses (Bouckennooghe, Raja & Butt, 2013) support the negative relationship between job satisfaction and turnover intention. Similar results were found in private commercial bank employees in Bangladesh (Rahman & Iqbal, 2013).

By modifying unpleasant work situations or aspects of their work roles, job-crafting behaviours may enhance job satisfaction, in turn restricting the development of turnover intentions. A cross-national study conducted by Sousa-Poza and Sousa-Poza (2000) indicated that job satisfaction is fuelled by the presence of job resources. This implies that job-crafting behaviours aimed at increasing social job resources and structural job resources help employees cope with and skilfully manage job demands that promote job satisfaction. Consequently, employees are less inclined to develop turnover intentions.

Job demands are positively and negatively related to job satisfaction. As mentioned previously, the literature distinguishes between challenging job demands and hindering job demands (Van den Broeck et al., 2010). Challenging job demands enhance job satisfaction by increasing work motivation and goal achievement. A meta-analysis conducted by Podsakoff et al. (2007) confirmed this notion. In contrast, hindering job demands hamper job satisfaction. The physiological and psychological costs associated with these job demands lead to energy depletion and prohibit goal attainment. This means that job-crafting behaviours aimed at increasing challenging job demands and decreasing hindering job demands promote job satisfaction, which in turn has a negative impact on the development of turnover intentions.

Accordingly, the conclusion can be drawn that job crafting has a significant negative impact on turnover intention. Even though this relationship has not been empirically tested, there is reason to believe that employees employed by audit firms operating in the South African FSI who engage in job crafting are less likely to develop turnover intentions. As employees are able to improve the alignment between jobs and their personal passions, preferences and motives (through job-crafting behaviours), they become more satisfied with their jobs and less prone to actively seeking alternative employment opportunities (turnover intention).

***Proposition 4:*** Job crafting has a significant negative impact on turnover intention.

#### **2.3.1.5. Job crafting and meaningful work**

Alderfer (1972) stated that all humans live in the realm of meanings. Therefore it is no surprise that finding meaning in work constitutes a fundamental need of employees (Rosso et al., 2010). According to Wrzesniewski and Dutton (2001), job crafting holds important implications for the meaningfulness of work. However, the original job-crafting theory does not specify whether job crafting influences employees' perceptions in positive or negative ways. Fortunately, more recent research pointed to the positive relationship between job crafting and work meaningfulness. In modern organisations, where "job designs are no longer a static source of constraint and top-down control" (Wrzesniewski et al., 2013. p. 287), proactive, self-initiated job-crafting behaviours can be used to enhance employees' perceptions of meaningfulness.

As mentioned before, meaningful work involves a dynamic process of 'meaningfulness-making' (Park & Folkman, 1997; Wrzesniewski, 2003). It is not a passive product of definite antecedents, but concerns an active process in which employees themselves, the job characteristics and the social environment are in an on-going and dynamic relationship. Scroggins (2008) supports this notion. This author conducted a research study on the antecedents and consequences of meaningful work among 208 employees in seven diverse organisations operating in different industries (i.e. health care, telemarketing, insurance, accounting, food and beverage, and sales and retail). The results showed that employees who did not perceive their work as meaningful actively engaged in crafting behaviours to enhance the meaningfulness of their work.

Meaningful work comprises three dimensions: job characteristics (the set of tasks and duties formally assigned to employees), the relational architecture of a work environment (social relationships with superiors, peers, subordinates, and clients) (Salancik & Pfeffer, 1978) and work-related cognitions (Roberson, 1990, as cited in Wrzesniewski & Dutton, 2001). Correspondingly, scholarly research delineates three forms of job crafting that employees can use to actively enhance the meaningfulness of their work, namely task crafting, relational crafting, and cognitive crafting (Wrzesniewski & Dutton, 2001). Task crafting and relational crafting utilise job resources and job demands to enhance the significance, value and worth of jobs. In contrast, cognitive crafting involves the cognitive (psychological) modification of perceptions (Berg et al., 2007) of the meaningfulness of work-related activities (Hackman & Oldham, 1980; Tausky, 1995). Goffman (1974) makes reference to 'regrounding'.

Previous research endeavours therefore have gathered evidence in support of the significant positive impact that job crafting has on meaningful work. However, this relationship has not been tested among employees employed by audit firms operating in the South African FSI. Nevertheless, there is reason to believe that this hypothesised relationship exists within the latter context. As employees engage in either one of the three forms of job crafting outlined by scholarly research (i.e. task crafting, relational crafting and cognitive crafting), they are able to enhance the meaningfulness of their jobs.

***Proposition 5:*** Job crafting has a significant positive impact on meaningful work.

#### **2.3.1.6. Meaningful work and turnover intention**

Work motivation is the primary determinant of behavioural and attitudinal consequences. The significance, value and worth that employees attribute to their work influence their perceptions of meaningfulness (Michaelson, 2010a, 2010b; Moriarty, 2009). When employees feel that the time spent and effort used to complete tasks are purposeful, perceptions of meaningfulness are cultivated (Rothmann & Hamukang'andu, 2013). As a result, employees are intrinsically motivated. According to Cho and Lewis (2012) and Hackman and Oldham (1975, 1988), employees who are internally motivated by their work are less prone to the development of turnover intentions. Instead of actively seeking alternative employment opportunities, these employees are encouraged to exhibit favourable behaviours, responses and attitudes in their current organisations. Fairlie (2011) concurs, pointing out that perceptions of meaningfulness counteract feelings of cynicism and the development of turnover intentions.

A two-year longitudinal study conducted among social welfare supervisory personnel confirmed that employees who were fulfilled by the meaningfulness of their work were less inclined to leave their organisation (Wright & Bonett, 1992). More recently, studies conducted among university employees (Steger, Dik & Duffy, 2012) and managers in the South African agricultural sector (Swart & Rothman, 2012) confirmed this notion. According to Steger et al. (2012), meaningful work accounts for an equal amount of variance in organisational commitment and withdrawal intentions (turnover intention). This implies that employees who do not perceive their work as meaningful exhibit lower organisational commitment. They actively seek alternative employment opportunities to satisfy their fundamental need for meaningful work. This was also reiterated in the Talent Edge 2020 survey (Deloitte, 2011).

As illustrated above, previous research studies have found empirical support in favour of the significant negative impact that meaningful work has on turnover intention. However, this relationship has not been tested among employees employed by audit firms operating in the South African FSI. Nevertheless, there is reason to believe that this hypothesised relationship exists in the latter context. Employees who perceive their work as significant, valuable and worthwhile are less prone to develop turnover intentions. Their work represents an important source of intrinsic motivation.

**Proposition 6:** Meaningful work has a significant negative impact on turnover intention.

#### **2.3.1.7. Meaningful work and employee engagement**

The provision of meaningful work has become increasingly important. As mentioned previously, employees seek meaning in their work more so than in any other facet of their lives (Holbeche & Springett, 2004; Conger, 1994). The conceptual link between meaningful work and employee engagement is underscored throughout the literature. Numerous scholars advocate that meaningful work is a source of richer, more productive and satisfying employment (e.g. Bakker et al., 2012; Britt, Adler & Bartone, 2001, Britt, Castro & Adler, 2005, Csikszentmihalyi, 2000, Kahn, 1990 and Salanova & Agut, 2005, as cited in Chen, 2007; Kahn, 1990; Ram & Prabhakar, 2011; Stringer, 2008, as cited in Fairlie, 2011; Steger & Dik, 2009; Towers Perrin, 2003, as cited in Scroggins, 2008). Teresa Amabile, Director of Research at Harvard Business School, agrees that meaningful work is the most influential factor of employee engagement (PeopleMetrics, 2011). It inspires absorption, dedication and vigour, which meld with the cognitive and motivational components of employee engagement.

A study conducted by May et al. (2004) revealed a .63 correlation between Kahn's dimensions of meaningfulness and engagement. Their results indicated that, for each 10 percent increase in meaningful work, employee engagement rose by eight percent. Subsequent studies conducted among employees of a multinational oil company in South Africa (Olivier & Rothmann, 2007) randomly selected employees with a two-year tenure (Stringer & Broverie, 2007, as cited in Steger, Littman-Ovadia, Miller, Menger & Rothmann, 2013), and white-collar employees from Israel (Steger et al., 2013) produced similar results. In the South African FSI, Kock (2010) has identified seven key drivers of employee engagement (i.e. meaningfulness, resourcefulness, self-awareness, teamwork and co-workers, organisation connectivity, job identity, and supervisor relations), of which meaningfulness was the most important.

Previous research endeavours therefore have gathered evidence in support of the significant positive impact that meaningful work has on employee engagement. However, this relationship has not been tested among employees employed by audit firms operating in the South African FSI. Nevertheless, there is reason to believe that this hypothesised relationship exists within the latter context. Employees who perceive their work to be significant, valuable and worthwhile are able to invest themselves completely in and engage fully with their work (Aktouf, 1992; Rothmann & Hamukang'andu, 2013).

**Proposition 7:** Meaningful work has a significant positive impact on employee engagement.

#### **2.3.1.8. Proactive personality and turnover intention**

Personality has long been studied in turnover research. Despite widespread evidence that intentions are the best predictors of actual behaviour (e.g. Bluedorn, 1982; Firth et al., 2004; Griffet et al., 2000; Hom et al., 1992; Van Breukelen et al., 2004; Mobley et al., 1978; Steel & Ovalle, 1984), not all employees who intend to quit their jobs engage in turnover behaviour. Expressed intentions are not equally reliable predictors of actual turnover behaviour in all instances.

The theory of planned behaviour suggests that the relationship between employees' intentions and actual behaviour may be moderated by individual differences between employees (Ajzen, 2002). Jeswani and Dave (2012) mention that individual differences in personality traits are the most important predictor of turnover behaviour. Ghiselli (1974, as cited in Allen et al., 2005), makes reference to the 'hobo syndrome', which proposes that some individuals are inherently predisposed to quitting their jobs. Their personality traits make them more susceptible to turnover behaviour. Empirical research supports the moderating effect of personality traits on the intentions-behaviour relationship (Mount & Barrick, 1998; Richardson, Lounsbury, Bhaskar, Gibson & Drost, 2009).

Correspondingly, it is plausible that individual differences in personality traits do not only predict actual turnover behaviours, but also affect the development of turnover intentions. Parker and Collins (2010) explain that employees with proactive personalities have a particularly high need for congruence with their environment. This is compounded by their inclination to engage in proactive behavioural responses (Gu, Yu & Guan, 2013; Van Hoye & Lootens, 2013). If their need for congruence is not met within their current organisation, their inclination to engage in proactive behavioural responses may encourage them to actively seek alternative employment opportunities (turnover intentions). This means that, when factors



pushing or pulling them from their jobs are present, these employees may explore alternative prospects in the job market.

Accordingly, the conclusion can be drawn that proactive personality has a significant positive impact on turnover intention. Even though this relationship has not been tested empirically, there is reason to believe that employees employed by audit firms operating in the South African FSI who have proactive personalities are more likely to develop turnover intentions when their need for congruence is not met in their work environment. Instead of tolerating their current circumstances, these employees actively respond to their frustration by developing turnover intentions.

***Proposition 8:*** Proactive personality has a significant positive impact on turnover intention.

#### **2.3.1.9. Proactive personality and job crafting**

Although historical top-down job design processes did not allow employees to design their own jobs, job crafting is omnipresent in modern organisations (Berg et al., 2010). Employees are able to make proactive, self-initiated changes to their jobs. This optimises goal attainment and aligns their own passions, preferences and motives with their jobs (Berg & Dutton, 2008; Berg et al., 2010). Importantly, this does not mean that all employees engage in job-crafting behaviours. Providing employees the opportunity to design their own job from the bottom up (through job-crafting behaviours) does not necessarily mean that they will engage in job crafting (Fuller, Marler & Hester, 2006). Similar to organisational variables (e.g. job types, venues, organisations, and management styles), individual differences influence employees' propensity to craft their own jobs (Lyons, 2008; Tims & Bakker, 2010).

In accordance with Bandura's perspective on interactionism, the theory of proactive personality advocates that employees with proactive personalities create their own work situation (Crant, 1996). Instead of passively receiving environmental presses, these employees effect environmental change and challenge the status quo. They display initiative, identify opportunities, take action and persevere until meaningful change occurs (Crant, 2000; Crant, 1995). Fay and Frese (2001) point out that these employees address future demands as soon as they are identified. This facilitates employee and organisational effectiveness. As a result, positive work-related outcomes are frequently experienced (Van Hove & Lootens, 2013; Yousaf et al., 2013).

It therefore is plausible that individual differences in proactivity affect employees' willingness to engage in job crafting. Even though the proposed significant positive impact



that proactive personality has on job crafting (Tims & Bakker, 2010) has not been found to be statistically significant (Vreugdenhil, 2012), there is reason to believe that employees employed by audit firms operating in the South African FSI who have proactive personalities are more likely to exhibit job-crafting behaviours. Rather than passively receiving environmental presses, these employees make use of the opportunity to design their own job from the bottom up (through job-crafting behaviours).

**Proposition 9:** Proactive personality has a significant positive impact on job crafting.

## 2.4. SUMMARY

This chapter undertook an overview of the relevant literature. The Job-Demands Resources Model served as the guiding framework to understand and elicit the antecedents of variance in turnover intention and employee engagement in employees employed by audit firms operating in the South African FSI. Figure 2.2 provides a graphical portrayal of the interrelationships between latent variables of interest (viz. employee engagement, job crafting, meaningful work, proactive personality and turnover intention).

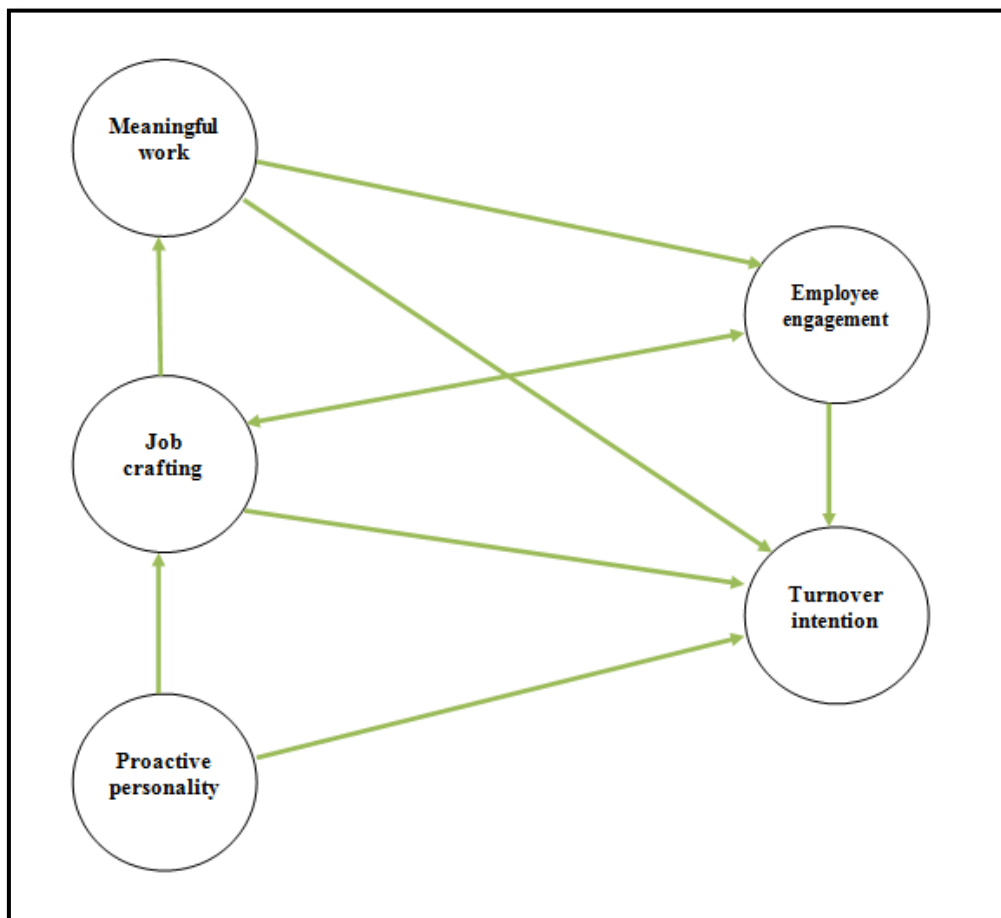


Figure 2.2. Theoretical model of turnover intention and employee engagement

## **CHAPTER 3**

### **RESEARCH METHODOLOGY**

#### **3.1. INTRODUCTION**

This chapter undertakes a detailed description of the methodology employed throughout the research process to obtain answers to the research initiating question:

“What are the antecedents of variance in turnover intention and employee engagement among employees employed by audit firms operating in the South African FSI?”

The research methodology refers to the tools and procedures used during the research process. According to Babbie and Mouton (2006) and Theron (2013), the research methodology serves the epistemic ideal through two characteristics, namely objectivity and rationality. By explicitly focusing on the reduction of error, it determines the validity and credibility of inferences (Theron, 2011). Therefore the researcher must tread carefully throughout the research process.

Before discussing the methodology used in this research study, it is necessary to revisit the study objectives (Swart, 2013). As mentioned previously, the primary objective of this research study was to develop and empirically test a structural model that explains the antecedents of variance in turnover intention and employee engagement among employees employed by audit firms operating in the South African FSI.

This research study aimed to:

- Determine the level of turnover intention and employee engagement among employees employed by a sample of audit firms operating in the South African FSI;
- Identify the most salient antecedents of variance in turnover intention and employee engagement among employees employed by a sample of audit firms operating in the South African FSI;
- Propose and test an explanatory turnover intention and employee engagement structural model; and
- Highlight the managerial implications of the research findings and recommend practical interventions to decrease turnover intention and enhance employee engagement among employees employed by audit firms operating in the South African FSI.

### 3.2. STRUCTURAL MODEL EXPRESSED IN LISREL NOTATION

The proposed turnover intention and employee engagement structural model, depicted in Figure 3.1, illustrates the hypothesised relationships between endogenous ( $\eta$ ) and exogenous ( $\xi$ ) latent variables.

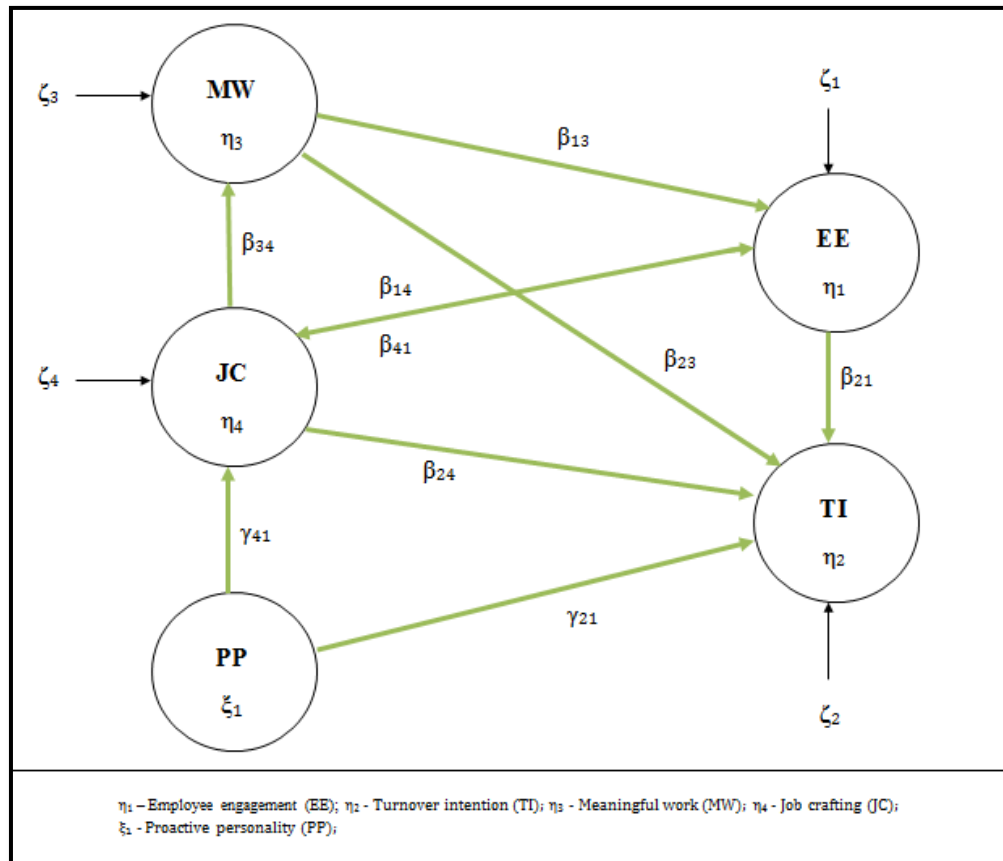


Figure 3.1. Proposed turnover intention and employee engagement structural model expressed in LISREL notation

### 3.3. SUBSTANTIVE RESEARCH HYPOTHESIS

To develop and empirically test a structural model that explains the antecedents of variance in turnover intention and employee engagement among employees employed by audit firms operating in the South African FSI, a substantive research hypothesis was formulated.

The overarching substantive research hypothesis<sup>4</sup> hypothesises that the proposed turnover intention and employee engagement structural model, depicted in Figure 3.1, represents a

<sup>4</sup> The overarching research hypotheses refer to the exact fit null hypothesis and close fit null hypothesis.

valid account of the psychological processes that determine variance in turnover intention and employee engagement among employees employed by audit firms operating in the South African FSI (Theron, 2013). This research hypothesis can be divided into nine more detailed, path-specific substantive research hypotheses.

- Hypothesis 1:** Employee engagement ( $\eta_1$ ) has a significant negative impact on turnover intention ( $\eta_2$ ).
- Hypothesis 2:** Employee engagement ( $\eta_1$ ) has a significant positive impact on job crafting ( $\eta_4$ ).
- Hypothesis 3:** Job crafting ( $\eta_4$ ) has a significant positive impact on employee engagement ( $\eta_1$ ).
- Hypothesis 4:** Job crafting ( $\eta_4$ ) has a significant negative impact on turnover intention ( $\eta_2$ ).
- Hypothesis 5:** Job crafting ( $\eta_4$ ) has a significant positive impact on meaningful work ( $\eta_3$ ).
- Hypothesis 6:** Meaningful work ( $\eta_3$ ) has a significant negative impact on turnover intention ( $\eta_2$ ).
- Hypothesis 7:** Meaningful work ( $\eta_3$ ) has a significant positive impact on employee engagement ( $\eta_1$ ).
- Hypothesis 8:** Proactive personality ( $\gamma_1$ ) has a significant positive impact on turnover intention ( $\eta_2$ ).
- Hypothesis 9:** Proactive personality ( $\gamma_1$ ) has a significant positive impact on job crafting ( $\eta_4$ ).

### 3.4. RESEARCH DESIGN

Babbie and Mouton (2006) refer to the indispensable nature of exploratory research studies, which they say frequently yield novel insights. However, to empirically investigate the overarching substantive research hypothesis, as well as the path-specific substantive research hypotheses, the researcher requires a research plan. This plan helps to ensure unambiguous, empirical evidence with which the operational hypothesis can be evaluated (Theron, 2013), thereby directly influencing the overall success of the research process.

The research design denotes the strategy used to direct data collection, test the hypotheses, control variance, and derive answers to the research initiating questions (Babbie & Mouton, 2006). Kerlinger (1973) adds that it maximises systematic variance, minimises error variance, and controls extraneous variance. According to Theron (2011), the research design is not selected randomly. It is a product of the type of research initiating question, research problem and empirical evidence needed to test the aforementioned hypotheses.

An ex post facto correlational design, depicted in Figure 3.2, is a systematic empirical inquiry that does not make use of random assignment or experimental manipulation (Simon & Goes, 2013). In other words, the researcher does not have any direct control over the independent variables (Kerlinger & Lee, 2000; Simon & Goes, 2013). The primary objective of this research design was to observe the variation in a specific variable when other variables change. Based on observations of variations in the dependent and independent variables, inferences are made concerning the hypothesised relationships between the endogenous ( $\eta$ ) and exogenous ( $\xi$ ) latent variables (Kerlinger & Lee, 2000). Measures of the observed variables are obtained from the calculated observed covariance matrix.

[X11]	[X12]	..	Y11	Y12	..	Y1i	..	Y1p
[X21]	[X22]	..	Y21	Y22	..	Y2i	..	Y2p
:	:	..	:	:	..	:	..	:
[Xj1]	[Xj2]	..	Yj1	Yj2	..	Yji	..	Yjp
:	:	..	:	:	..	:	..	:
[Xn1]	[Xn2]	..	Yn1	Yn2	..	Yni	..	Ynp

**Figure 3.1. Ex post facto correlational design**

(Theron, 2013)

There are three weaknesses inherent in the use of non-experimental data, namely the inability to manipulate independent variables, the lack of power to randomise, and the risk of erroneous interpretations (Kerlinger & Lee, 2000). Nonetheless, considering that most of the phenomena in the field of psychology are not open to a controlled environment or manipulation, ex post facto correlational designs are commonly used. Accordingly, despite the aforementioned disadvantages, an ex post facto correlational design was used for the purposes of this research study. The latent variables of interest were measured on one occasion as they existed naturally in audit firms operating in the South African FSI.

The human resource managers of the participating audit firms received an electronic copy of the formal letter of proposal<sup>5</sup>, informed consent form<sup>6</sup> and proof of ethical clearance by Stellenbosch University. These documents were supplemented with email and telephonic correspondence.

Approximately three months (late May to early August 2013) elapsed from the initial contact with the selected audit firms to data collection. Before commencing with data collection (Tuesday, 6 August 2013), the human resource managers were required to return a signed copy of the informed consent document. This document provided formal, written permission that the audit interns and audit managers of the respective regional offices may be included in the sample group of this research study

Individual participants were assessed with a self-administered web-based survey developed specifically for the purposes of this research study. The survey was distributed electronically. The participants were given three weeks to complete the survey (Tuesday, 6 August to Monday, 26 August 2013). The pilot study showed that the survey took approximately five to eight minutes to complete. Weekly reminders were sent to the individual participants to encourage their participation. A total of 391 individuals completed the survey (48.87 percent response rate).

After the successful completion of data collection, the data was subject to a range of statistical analyses. Inferences were made and conclusions were drawn from the results.

### **3.5. RESEARCH PARTICIPANTS**

Sampling involves the selection of a sub-set, or segment, of the total population (Babbie & Mouton, 2006; Bryman & Bell, 2003). For the purposes of this research study, the data needed to be collected from employees employed by audit firms operating in the South African FSI. Three audit firms operating in the South African FSI were selected to participate in the study. The firms, with regional offices located across South Africa, all are part of international financial services providers. These audit firms concentrate primarily on the provision of auditing and accounting services at a fee.

---

<sup>5</sup> Appendix A: Letter of proposal

<sup>6</sup> Appendix B: Informed consent form

There are two techniques that can be employed during sampling identification, namely probability (i.e. random, stratified, cluster and systematic sampling) and non-probability sampling (i.e. quota, purposive, accidental and snowball sampling) (Kerlinger, 1973; Struwig & Stead, 2001). To avoid bias and maintain the representativeness of the sample, purposive (judgement) sampling was used in this research study.

According to Babbie and Mouton (2006), purposive sampling relies on the researcher's subjective judgement and careful consideration to select apparently distinctive areas in the sample population that are informative and adopt the grounded theory (Saunders, Lewis & Thornhill, 2007). No true random method was used to select the three participating audit firms. Due to the organisational time constraints (limited time for data collection and research endeavours) faced by audit firms operating in the South African FSI, purposive sampling was the most feasible option. The heterogeneous nature of the sample population minimised bias.

Sampling directly influences the extent to which observations can or may be generalised to the target population (Terre Blanche & Durrheim, 1999). Theron (2011) highlights the importance of an adequate sample size. Although there is disagreement on the general guidelines for sample size (e.g. MacCallum, Widaman, Zhang & Hong, 1999, Tabachnick & Fidell, 2001 and Velicer & Fava, 1998, as cited in Janse van Rensburg, 2010), scholars do agree that larger sample sizes have a higher probability of producing stable correlations between variables and displaying greater replicability of outcomes (Worthington & Whittaker, 2006).

When using SEM, there are three considerations that influence the appropriateness of a sample size, namely the ratio of sample size to the number of parameters to be estimated; the statistical power associated with the close fit null hypothesis ( $RMSEA \leq .05$ ) against the hypothesis of average fit ( $RMSEA > .05$ ); and the practicality and logistical ease associated with a sample (Burger, 2011). For most SEM applications a sample size of 200 observations or more is satisfactory (Kelloway, 1998; MacCallum, Browne & Sugawa, 1996).

In the light of these guidelines, the sample group selected for the purposes of this research study comprised approximately 800 audit interns and audit managers. A total of 391 individuals completed the survey (48.87 percent response rate). The profile of the sample population, in terms of biographical and employment information, is depicted in Table 3.1.

**Table 3.1***Profile of the Sample Population*

<b>Age</b>		
<b>Minimum and maximum age</b>	<b>Mean</b>	<b>Standard deviation</b>
18; 57	26.53	5.52
<b>Gender</b>		
<b>Variable</b>	<b>Frequency</b>	<b>Percentage</b>
<i>Females</i>	237	60.61 %
<i>Males</i>	154	39.39 %
<b>Ethnic group</b>		
<b>Variable</b>	<b>Frequency</b>	<b>Percentage</b>
<i>African</i>	84	21.48 %
<i>Asian</i>	37	9.46 %
<i>Coloured</i>	35	8.95 %
<i>White</i>	224	57.29 %
<i>Other (not specified)</i>	11	2.81 %
<b>Province</b>		
<b>Variable</b>	<b>Frequency</b>	<b>Percentage</b>
<i>Eastern Cape</i>	65	16.62 %
<i>Free State</i>	22	5.63 %
<i>Gauteng</i>	72	18.41 %
<i>KwaZulu-Natal</i>	39	9.97 %
<i>Limpopo</i>	37	9.46 %
<i>Mpumalanga</i>	69	17.65 %
<i>Northern Cape</i>	2	0.51 %
<i>North West</i>	1	0.26 %
<i>Western Cape</i>	84	21.48 %
<b>Home language</b>		
<b>Variable</b>	<b>Frequency</b>	<b>Percentage</b>
<i>Afrikaans</i>	130	33.25 %
<i>English</i>	187	47.83 %



<i>isiXhosa</i>	16	4.09 %
<i>isiZulu</i>	16	4.09 %
<i>Sesotho</i>	15	3.84 %
<i>Other (not specified)</i>	27	33.25 %

---

Highest level of education completed		
Variable	Frequency	Percentage
<i>Matric</i>	35	8.95 %
<i>Diploma</i>	15	3.84 %
<i>Degree</i>	41	10.49 %
<i>Honours degree</i>	274	70.08 %
<i>Master's degree</i>	7	1.79 %
<i>Other (not specified)</i>	19	4.86 %

---

Organisational tenure		
Variable	Frequency	Percentage
<i>Less than 1 year</i>	133	34.02 %
<i>1 year</i>	31	7.93 %
<i>2 years</i>	88	22.51 %
<i>3 years</i>	55	14.07 %
<i>More than 3 years</i>	84	21.48 %

---

Department		
Variable	Frequency	Percentage
<i>Auditing</i>	322	82.35 %
<i>Consulting</i>	16	4.09 %
<i>Financial advisory</i>	7	1.79 %
<i>Tax</i>	5	1.28 %
<i>Other (not specified)</i>	41	10.49 %

### 3.6. MEASURING INSTRUMENTS

The researcher's ability to evaluate the fit of a structural model depends on the availability of instruments that measure the latent variables of interest. Diamantopoulos and Siguaw (2000, p. 89) confirm this notion by explaining that, "unless we can trust the quality of our measurements, then any assessment of the substantive relations of interest will be problematic". To be able to provide empirical evidence that the hypothesised relationships

are supported by the proposed turnover intention and employee engagement structural model, and offer a plausible explanation for differences in turnover intention and employee engagement among employees employed by audit firms operating in the South African FSI, valid and reliable instruments should be used to measure the endogenous ( $\eta$ ) and exogenous ( $\xi$ ) latent variables depicted in Figure 3.1 (Swart, 2013).

The empirical evidence needed to support the psychometric integrity of the indicator variables used to operationalise the latent variables portrayed by the proposed turnover intention and employee engagement structural model are presented in the subsequent section of this chapter. Based on existing research evidence, the reliability and validity of the selected instruments are reported to justify their inclusion. In addition, Chapter 4 will report the success with which the indicator variables represent the latent variables included in the turnover intention and employee engagement structural model<sup>7</sup>.

The self-administered web-based survey comprised seven sections. The first two sections measured the participants' biographical and employment information. The subsequent sections measured specific latent variables using valid and reliable measuring instruments. These instruments were the Utrecht Work Engagement Scale (UWES-9) (Schaufeli et al., 2006), the Turnover Intention Scale (Moore, 2000), the Psychological Meaningfulness Scale (May et al., 2004), the Job Crafting Scale (Tims et al., 2012), and the six-item Proactive Personality Scale (Claes et al., 2005). To enable the individual participants to complete the self-administered web-based survey, they were given clear and concise instructions.

### **3.6.1. Biographical information**

The first section of the self-administered web-based survey collected the participants' biographical information (i.e. age, gender, ethnic group, home language and province).

### **3.6.2. Employment information**

The second section of the self-administered web-based survey collected the participants' employment information (i.e. highest level of education completed, organisational tenure and department).

---

<sup>7</sup> Refer to the results of the item analysis and the confirmatory factor analysis (CFA).

### 3.6.3. Utrecht Work Engagement Scale (UWES-9)

Employee engagement was measured by Schaufeli et al. (2006) Utrecht Work Engagement Scale (UWES-9). The Utrecht Work Engagement Scale (UWES-24) originally consisted of 24 items (Schaufeli & Bakker, 2003). The scale measured three subscales, namely vigour (nine items), dedication (eight items) and adsorption (seven items). The vigour subscale measured employees' energy and level of mental resilience while working, their willingness to invest effort in their work, and their persistence when facing obstacles. The dedication subscale determined whether employees experience a sense of significance at work, and whether they are enthusiastic, inspired and proud of their work connection. The absorption subscale was used to establish whether employees are fully concentrated on their work, so that time passes quickly and they have difficulty detaching themselves from their work. Items were derived from the Maslach Burnout Inventory (MBI) (Maslach, Jackson & Leiter, 1996).

After the deletion of psychometrically unsound items, only 17 (UWES-17) of the original items remained (Schaufeli et al., 2002). Further psychometric evaluations identified two more weak items (UWES-15) (Demerouti, Bakker, Janssen & Schaufeli, 2001). Subsequent research, conducted among employees in 10 different countries, revealed that the UWES-17 could be reduced to nine items (UWES-9) (Janse van Rensburg, 2010). A cross-cultural analysis of Italian and Dutch white-collar employees supported the excellent internal consistency reliability (Cronbach's  $\alpha$ ) of the UWES-9 ( $\alpha = .92$ ) and its subscales, depicted in Table 3.2 (Balducci et al., 2011). Today, the UWES-9 is generally used by researchers and practitioners.

In this research study, the three subscales of the UWES-9 were combined. The composite measurement indicator measured employee engagement among employees employed by audit firms operating in the South African FSI. Responses were scored on a seven-point Likert scale (0 = never; 6 = every day). None of the items were reverse scored.

**Table 3.2**

*Cronbach's Alpha of the UWES-9 Subscales*

UWES-9 subscales	Cronbach's $\alpha$
<i>Vigour</i>	$\alpha = .86$
<i>Dedication</i>	$\alpha = .89$
<i>Absorption</i>	$\alpha = .76$

#### **3.6.4. Turnover Intention Scale**

Turnover intention was measured by Moore's (2000) Turnover Intention Scale. This four-item scale ( $\alpha = .92$ ) was developed on the basis of the work of Jackson, Turner and Brief (1987). The Turnover Intention Scale was validated in a study conducted on a random sample of professionals from the Association for Information Technology Professionals (AITP). The AITP was founded in 1951 and has more than 8 500 members throughout the United States and Canada. Only employees who resided in the United State participated in the validation process. The sample group included employees from all facets of the organisation (e.g. managers, programmers and system designers).

In this research study, the Turnover Intention Scale was used to measure the probability that employees employed by audit firms operating in the South African FSI would quit their job in the foreseeable future. Responses were scored on a five-point Likert scale (1 = very unlikely; 5 = very likely). Two of the item scores were reverse scored (items 1 and 3).

#### **3.6.5. Psychological Meaningfulness Scale**

Meaningful work was measured by May et al.'s (2004) Psychological Meaningfulness Scale. This six-item scale was developed from work done by May (2003) and Spreitzer (1995). The Psychological Meaningfulness Scale was validated in a study conducted on a random sample of administrative and management employees in the American insurance industry. The majority of participants were female. The results supported the excellent internal consistency reliability (Cronbach's  $\alpha$ ) of the Psychological Meaningfulness Scale ( $\alpha = .90$ )

In this research study, the Psychological Meaningfulness Scale measured the degree of meaning employees employed by audit firms operating in the South African FSI find in their work-related activities. Responses were scored on a five-point Likert scale (1 = strongly disagree; 5 = strongly agree). None of the items were reverse scored.

#### **3.6.6. Job Crafting Scale**

Job crafting was measured by Tims et al.'s (2012) Job Crafting Scale (Dutch translation). Initially, 42 items were selected to capture the three dimensions of job crafting. The increasing job resources subscale (nineteen items) measured whether employees took initiative resourcefully to increase their job resources. These items included in this subscale were adapted from validated Dutch scales measuring job resources (Bakker, Demerouti, Taris, Schaufeli & Schreurs, 2003; Bakker et al., 2004). The increasing challenging job demands subscale (fourteen items) measured the extent to which employees increased job

demands that evade boredom and stimulate personal growth. The upsurge of knowledge-related jobs (service-orientated economy) (Grant, Fried, Parker & Frese, 2010; Grant & Parker, 2009; Parker, Wall & Cordery, 2001) necessitated the development of the decreasing hindering job demands subscale (nine items). Using items derived from research conducted by Bakker et al. (2004), this subscale measured employees' efforts to proactively lower their job demands when they become overwhelmed.

After conducting principal factor analysis (maximum likelihood) with oblique rotation in SPSS, the scale was reduced to 21 items. In addition, the increasing job resources subscale was divided into two separate subscales, namely increasing structural job resources and increasing social job resources (Tims et al., 2012). The increasing structural job resources subscale measures employees' efforts to increase variety, opportunity for development and autonomy. In contrast, the increasing social job resources subscale measures employees' efforts to increase social support, supervisory coaching and feedback.

Three separate validation studies conducted in the Netherlands supported the internal consistency reliability (Cronbach's  $\alpha$ ) of the job crafting subscales, as depicted in Table 3.3 (Tims et al., 2012).

In this research study, the four subscales of the Job Crafting Scale were combined. The composite measurement indicator measured job-crafting behaviour in employees employed by audit firms operating in the South African FSI. Responses were scored on a six-point Likert scale (0 = never; 6 = very often). None of the items were reverse scored.

**Table 3.3**

*Cronbach's Alpha of the Job Crafting Scale Subscales*

<b>Job Crafting Scale subscales</b>	<b>Cronbach's <math>\alpha</math></b>
<i>Increasing structural job resources</i>	$\alpha = .82$
<i>Increasing social job resources</i>	$\alpha = .77$
<i>Increasing challenging job demands</i>	$\alpha = .75$
<i>Decreasing hindering job demands</i>	$\alpha = .79$

### **3.6.7. Proactive Personality Scale**

Proactive personality was measured with Claes et al.'s (2005) shortened six-item Proactive Personality Scale (Dutch translation). In 1993, Bateman and Crant published the self-report Proactive Personality Scale. This one-dimensional scale, used in American, European and Belgium samples, consisted of 17 items (Bateman & Crant, 1993; Becherer & Maurer, 1999,

Deluga, 1998, Pitt, Ewing & Berthon, 2002 and Pringels & Claes, 2001, as cited in Claes et al. 2005; Crant, 1995, 1996). Over time, shortened versions of the Proactive Personality Scale were used by researchers and practitioners to assess employees' proactivity. Originally, researchers selected the 10 items with the highest average factor loading. Later, other, abbreviated forms of the Proactive Personality Scale items (6, 5 and 4 respectively) were selected (Bateman & Crant, 1993; Seibert, Crant & Kraimer, 1999). Claes and colleagues (2005) tested the six-item Proactive Personality Scale in cross-cultural settings (i.e. Belgium, Finland and Spain) to determine its structural equivalence. The findings indicated that the six-item Proactive Personality Scale was the only internally consistent (Cronbach's  $\alpha$ ) measure of proactivity across independent samples in different countries ( $\alpha = .92$ ).

In this research study, the six-item Proactive Personality Scale measured the proactivity of employees employed by audit firms operating in the South African FSI. Responses were scored on a seven-point Likert scale (1 = strongly agree; 7 = strongly disagree). None of the items were reverse scored.

### **3.7. ETHICAL CONSIDERATIONS**

Empirical behavioural research requires the active or passive involvement of individuals. Participating in research studies may impose on these individuals' dignity, rights, safety or well-being. The researcher has to reflect on potential ethical risks and consider whether the purpose of the research endeavour justifies any compromises (Engelbrecht, 2012). In this research study there were no serious potential ethical risks or discomfort. Nonetheless, ethical concerns relating to the participation of audit firms and individual participants were dealt with in fitting ways.

This research study commenced only once ethical clearance was received from the Research Ethics Committee: Human Research (Humanities) of Stellenbosch University (20 June 2013).

The measuring instruments included in the self-administered web-based survey are available in the public domain. In terms of the Health Professions Act, No. 56 of 1974 (Republic of South Africa, 2006), none of the instruments used in this research study is classified as a psychological test.

In accordance with Chapter 3 of the Ethical Rules of Conduct for Practitioners Registered under the Health Professions Act, No. 56 of 1974 (Republic of South Africa, 2006), the participating audit firms and individuals were assured of confidentiality and anonymity. The self-administered web-based survey was completed electronically. Only the principal

researcher, her supervisors and a statistician had access to the individual participants' electronic responses. The first two sections of the survey required the disclosure of biographical and employment information. This information could not be used to identify individual participants. The only discomfort that could have been experienced by individual participants was time-related. The pilot study results showed that the survey took approximately five to eight minutes to complete.

Further to this, the participating audit firms did not have access to the raw data. They received a feedback report in which the composite statistical results were discussed. No differentiation was made between the three participating audit firms.

Participation in this research study was voluntary. Before distributing the self-administered web-based survey, the human resource managers of the respective regional offices had to complete an informed consent document. This document satisfied the stipulations of Chapter 10 of the Ethical Rules of Conduct for Practitioners Registered under the Health Professions Act, No. 56 of 1974 (Republic of South Africa, 2006). Human resource managers were presented with an explanation of the purpose and objectives of the intended research study. In addition, the data collection procedure, potential risks and discomfort, benefits of participation, payment for participation, confidentiality, participation and withdrawal, and the rights of the research subjects were discussed. Furthermore, principle investigator and supervisors' contact details were provided. The human resource managers were given ample time and encouraged to ask questions, raise concerns and make suggestions. The informed consent document and emailed correspondence were in English. Supplementary telephonic correspondence was conducted in English or Afrikaans, depending on the human resources managers' preference.

Informed consent was obtained from the individual participants before they completed the self-administered web-based survey. The informed consent form satisfied the stipulations of Chapter 10 of the Ethical Rules of Conduct for Practitioners Registered under the Health Professions Act, No. 56 of 1974 (Republic of South Africa, 2006). The informed consent document was in English. Although English was not the mother tongue of all the individual participants, the human resource managers gave assurance that all the participants had a satisfactory level of language proficiency in English.

As outlined by Chapter 10 of the Ethical Rules of Conduct for Practitioners Registered under the Health Professions Act, No. 56 of 1974 (Republic of South Africa, 2006), the

participating audit firms and individual participants were not offered excessive or inappropriate financial or other inducements for their participation. Individual participants were offered a monetary incentive to compensate for their participation. Upon the completion of the self-administered web-based survey, they became eligible to win a R2 500 cash prize. The winner was selected randomly in the presence of two objective witnesses.

The participating audit firms did not receive any form of monetary compensation for their participation in this research study. They received a feedback report on the South African audit interns' and audit managers' self-rated levels of perceived turnover intention and employee engagement. These results provided the human resource managers, of the participating audit firms, insight into the problem under study, and highlighted the importance of developing tailor-made interventions that nurture employee retention and engagement.

### **3.8. MISSING VALUES**

When using survey data, the researcher often discovers that there are missing values. Missing values generally are attributed to the non-response of individual participants or to absenteeism (Mels, 2003, as cited in Swart, 2013), and can have a negative influence on the efficiency of the indicator variables. Before the commencement of data analysis, the researcher has to deal with missing values in fitting ways (Theron, 2013). Burger (2011) and Janse van Rensburg (2010) propose that list-wise deletion, pair-wise deletion, multiple imputation, imputation by matching, and full information maximum likelihood imputation can be used to rectify the problems associated with missing values. In this research study, the individual participants were required to respond to all the items included in the self-administered web-based survey, which helped avoid missing values.

### **3.9. STATISTICAL ANALYSIS**

A number of statistical techniques were used to analyse the data and to test the hypothesised relationships. These techniques included item analysis, CFA, parameter estimation, SEM and PLS path modelling. The software packages used to perform the aforementioned analyses were SPSS, Statistica 9, LISREL 8.8 and SmartPLS.

#### **3.9.1. Item analysis**

Item analysis is performed to investigate the reliability of each latent variable's indicators and the homogeneity of each subscale, and to screen items prior to their inclusion in composite item parcels representing the latent variables. Usually conducted by SPSS Reliability



Procedure, item analysis Cronbach's alpha ( $\alpha$ ) values assist the researcher in determining which items included in a specific scale (if any) negatively affect the overall reliability of the scale (contaminated behavioural expressions) (Theron, 2013). The literature suggests that, during the early stages of research on predictor tests or hypothesised measures of a construct, reliabilities of .70 or higher are sufficient, but in many other applied settings a reliability of .80 is not nearly high enough (Nunnally, 1978). In these settings, a reliability of .95 is deemed desirable and .90 is the minimum that should be accepted. If the overall reliability of a scale shows significant improvement after selected items have been deleted, they are excluded from subsequent CFA (Anastasi & Urbina, 1997).

### **3.9.2. Confirmatory factor analysis**

Structural model fit indices can only be interpreted unambiguously for or against the fitted structural model, if evidence exists in support of the indicator variables used to operationalise the latent variables (successful operationalisation) (Diamantopoulos & Siguaw, 2000). Operationalisation is successful if the measurement model reflecting the design intention and constitutive definition of the latent variable shows close fit, the estimated factor loadings are all statistically significant ( $p < .05$ ) and, in the completely standardised solution, the factor loadings are large ( $i_j \geq .71$ ) and the measurement error variances are statistically significant ( $p < .05$ ) but small (Theron, 2013). CFA is commonly used to evaluate measurement model fit. This factor analysis is more precise than exploratory factor analysis (EFA). It produces the series of LISREL model fit indices used to determine how the observed data fit the measurement model (Du Toit & Du Toit, 2001; Kelloway, 1998).

### **3.9.3. Parameter estimation**

Parameter estimation helps the researcher identify parameters that detract from a measure's validity. This is done by determining the statistical significance and magnitude of the freed factor loadings in  $\Lambda \times 1$  and the measurement error variances in the main diagonal in  $\Theta_\delta$ , and the statistical significance and magnitude of the co-variances between the latent variables (Diamantopoulos & Siguaw, 2000). If the slope of the regression of  $X_i$  on  $\xi_i$ , in the fitted measurement model is substantial and significant, the measure will provide a valid reflection of a specific latent variable (Diamantopoulos & Siguaw, 2008).

### **3.9.4. Structural equation modelling**

SEM has become increasingly popular in research across disciplines. In the social sciences it is 'obligatory' (Hooper, Coughlan & Mullen, 2008). This technique is used to conduct numerous statistical analyses with LISREL 8.80 (Du Toit & Du Toit, 2001; Jöreskog &

Sörbom, 1993, 1996), and enables the researcher to specify the casual relationships between the latent variables, assess the explained variance, and describe casual effects by fitting and testing the comprehensive LISREL model as a unified entity (Theron, 2013). In its most common form, the comprehensive LISREL model consists of a set of linear structural and measurement equations (Swart, 2013). It reveals patterns of covariance among the directly observed latent variables in terms of the hypothesised relationships.

### **3.9.5. Partial Least Squares Regression**

When there are many latent factors and they are highly collinear, PLS path modelling is used to construct predictive models. This technique models relationships between sets of observed variables using latent variables. It involves regression and classification tasks, as well as dimension reduction techniques and modelling tools. The main objective of PLS is to account for as much of the manifest factor variation as possible, while extracting latent factors to model responses. Therefore, the acronym PLS has also been used as referring to projections to latent structures (Tobias, 2003).

## **3.10. SUMMARY**

Chapter 3 has provided a description of the methodological choices made throughout the research process to obtain answers to the research initiating question. In summary, an ex post facto research design was used to collect primary data specifically for the purposes of this research study. Non-probability, purposive (judgment) sampling was used to select an appropriate sample group. Quantitative data was collected from audit interns and audit managers using a self-administered web-based survey. Instruments included in the survey were the Utrecht Work Engagement Scale (UWES-9) (Schaufeli et al., 2006), the Turnover Intention Scale (Moore, 2000), the Psychological Meaningfulness Scale (May et al., 2004), the Job Crafting Scale (Tims et al., 2012), and the six-item Proactive Personality Scale (Claes et al., 2005). Item analysis, CFA, parameter estimation, SEM and PLS were used to analyse the data and test the hypothesised relationships. The Statistica 9, LISREL 8.8, SPSS and SmartPLS software packages were used to perform the aforementioned analyses. The next chapter presents the research findings from the statistical analyses and their interpretation.

## CHAPTER 4

### RESULTS

#### 4.1. INTRODUCTION

The purpose of this chapter is to present and discuss the statistical results of the various analyses performed in this research study. Firstly, item analysis was performed to determine the psychometric integrity of the measures data used to represent the various latent dimensions. Thereafter, CFA was conducted to evaluate the measurement model fit. After establishing acceptable measurement model fit, the comprehensive LISREL model was fitted to determine structural model fit. These results were supplemented by PLS path analysis.

#### 4.2. VALIDATING THE MEASUREMENT MODEL

##### 4.2.1. Item analysis

The item analysis provided a preliminary indication of the value of the subsequent statistical analyses. Table 4.1 presents a summary of the item analysis results for each of the latent variable scales. The Cronbach's alphas<sup>8</sup> of internal consistency were excellent ( $> 0.80$ ) for all the scales included in the self-administered web-based survey. This was corroborated by satisfactorily high average inter-item correlations<sup>9</sup>.

**Table 4.1**

*Means, Standard Deviations and Internal Consistency Reliabilities*

Scale	Sample size	Number of items	Mean	Standard deviation	Cronbach's alpha	Average inter-item correlation
<i>EE</i>	391	9	3.92	0.97	.93	.60
<i>TI</i>	391	4	2.66	1.12	.85	.60
<i>MW</i>	391	6	3.89	0.82	.94	.74
<i>JC</i>	391	21	3.58	0.51	.87	.26
<i>PP</i>	391	6	5.65	0.82	.83	.45

EE = Employee engagement; TI = Turnover intention; MW = Meaningful work; JC = Job crafting; PP = Proactive personality

<sup>8</sup> The Cronbach's alpha measures internal consistency reliability. In accordance with Malhotra (2004), reliability scores of  $\geq .60$  were considered satisfactorily high in this research study.

<sup>9</sup> Inter-item correlations are a subtype of internal consistency reliability. Generally, values between 1.00 and  $> .05$  show excellent reliability, while values smaller than .05 and  $> .00$  indicate acceptable reliability.

#### **4.2.1.1. Turnover intention**

The Turnover Intention Scale obtained a Cronbach's alpha coefficient of .85, which indicated excellent internal consistency reliability. Item TI-3 was the only individual item that had a negative impact on the Cronbach's alpha coefficient. After its deletion, the reported coefficient increased to .86. However, this marginal improvement did not warrant its deletion.

The average inter-item correlation obtained for the Turnover Intention Scale was .60. None of the inter-item correlations reported for the individual items included in this scale were below .50. Item TI-3 had the lowest inter-item correlation (.56). All the other inter-item correlations were above .60. Item TI-2 had the highest inter-item correlation (.79).

#### **4.2.1.2. Employee engagement**

The UWES-9 obtained a Cronbach's alpha coefficient of .93, which indicated excellent internal consistency reliability. Deleting any one of the individual items included in the UWES-9 would have a negative impact on the reported coefficient. Therefore, no deletions were warranted.

The average inter-item correlation obtained for the UWES-9 was .60. None of the inter-item correlations reported for individual items included in this scale were below .50. Item EE-9 had the lowest inter-item correlation (.59). All the other inter-item correlations were above .60. Item EE-2 had the highest inter-item correlation (.88).

#### **4.2.1.3. Meaningful work**

The Psychological Meaningfulness Scale obtained a Cronbach's alpha coefficient of .94, which indicated excellent internal consistency reliability. Deleting any one of the items included in the Psychological Meaningfulness Scale would have a negative impact on the reported coefficient. Therefore no deletions were warranted.

The average inter-item correlation obtained for the Psychological Meaningfulness Scale was .74. None of the inter-item correlations reported for individual items included in this scale were below .50. Item MW-6 had the lowest inter-item correlation (.76). The remaining inter-item correlations were all above .80. Item MW-5 had the highest inter-item correlation (.88).

#### **4.2.1.4. Job crafting**

The Job Crafting Scale obtained a Cronbach's alpha coefficient of .87, which indicated excellent internal consistency reliability. Deleting any one of the items included in the Job Crafting Scale would have a negative impact on the reported coefficient. Therefore no deletions were warranted.

The average inter-item correlation obtained for the Job Crafting Scale was .26. Item JC-16 had the lowest inter-item correlation (.38) and item JC-21 had the highest inter-item correlation (.60). The majority of the inter-item correlations reported for individual items included in this scale were below .50. Nonetheless, these inter-item correlations were still considered acceptable. The results obtained from the split-half reliability procedure substantiated this notion (Guttman split-half coefficient = .87).

#### **4.2.1.5. Proactive personality**

The Proactive Personality Scale obtained a Cronbach's alpha coefficient of .83, which indicated excellent internal consistency reliability. Deleting any one of the items included in the Psychological Meaningfulness Scale would have a negative impact on the reported coefficient. Therefore no deletions were warranted.

The average inter-item correlation obtained for the Proactive Personality Scale was .45. Only Item PP-5 (.49) had an inter-item correlation below .50. Nevertheless, this inter-item correlation was still considered acceptable. The remaining inter-item correlations were all above .50, and item PP-4 had the highest inter-item correlation (.68).

#### **4.2.1.6. Decision regarding the reliability of latent variable scales**

The purpose of the foregoing item analysis was to provide insight into the functioning of each of the latent variable scales included in the self-administered web-based survey, and to establish the psychometric integrity of the indicator variables assigned to represent the latent variables.

The results of the abovementioned item analysis provided sufficient evidence to support the item parcels discussed in Chapter 3. Each latent variable scale was found to be internally consistent and reliable. All the Cronbach's alpha coefficients were  $> .80$ . This indicated that each latent variable scale had excellent internal consistency reliability. Considering that the researcher did not detect any poor items, no deletions were made. These results were corroborated by the satisfactorily high average inter-item correlations obtained for each latent variable scale.

It was concluded that the results of the item analysis confirmed the functioning of each latent variable scale included in the self-administered web-based survey, and the psychometric integrity of the indicator variables assigned to represent the latent variables. Therefore, the subsequent statistical analyses were also supported.

#### 4.2.2. Measurement model evaluation

CFA was conducted to evaluate the measurement model fit. All the model parameters were not tested in a single measurement model<sup>10</sup>. Three separate measurement models were constructed, namely the employee engagement measurement model, the job crafting measurement model, and the turnover intention, proactive personality and meaningful work measurement model.

##### 4.2.2.1. Employee engagement measurement model

The goodness-of-fit statistics revealed a Satorra-Bentler scaled chi-square value of 85.84 ( $p = 0.00$ ). Therefore the null hypothesis of the exact model fit ( $RMSEA = 0.00$ ) was rejected. The measurement model thus did not have the ability to reproduce the observed covariance matrix to a degree of accuracy explainable in terms of sampling error only. The P-value for the test of close fit ( $RMSEA \leq 0.05$ ) = 0.0029 echoed these results. Therefore, the null hypothesis of the close model fit was also rejected.

The RMSEA value<sup>11</sup> (0.081), which was just above the reasonable fit cut-off value ( $RMSEA < 0.08$ ), showed mediocre fit. However, this was not corroborated by the GFI value<sup>12</sup> (1.00) and the AGFI value<sup>13</sup> (0.99). These values supported good measurement model fit.

Each of the reported p-values<sup>14</sup> was significant ( $p > 0.05$ ) and the t-values<sup>15</sup> exceeded the critical cut-off values ( $-1.96 < t\text{-value} < +1.96$ ). Item EE-9 had the lowest regression coefficient (0.71) and t-value (18.68). Item EE-4 had the highest regression coefficient (0.97)

<sup>10</sup> Due to the large number of model parameters and restricted sample size, it was necessary to construct three separate measurement models to test all the model parameters.

<sup>11</sup> The root mean square error of approximation (RMSEA) value indicates the amount of discrepancy between the observed population co-variance matrix and the estimated population co-variance matrix implied by the measurement model per degree of freedom (Hooper et al., 2008). Generally, values  $< 0.05$  indicate good model fit, values between 0.05 and 0.08 indicate reasonable fit, values  $> 0.08$  but  $< 0.10$  indicate mediocre fit, and values  $> 0.10$  indicate poor fit (Diamantopoulos & Siguaw, 2000; Kelloway, 1998).

<sup>12</sup> The Goodness-of-Fit Index (GFI) value measures the fit between the hypothesised model and the observed covariance matrix (Diamantopoulos & Siguaw, 2000). Values closer to 1 and  $> 0.90$  indicate good fit (Hooper et al., 2008).

<sup>13</sup> The Adjusted Goodness-of-Fit Index (AGFI) value corrects the GFI value, which is affected by the number of indicators of each latent variable (Tabachnick & Fidell, 2007). Values closer to 1 and  $> 0.90$  indicate good fit (Hooper et al., 2008).

<sup>14</sup> The P-value reveals the probability of obtaining a test statistic (t-value) at least as extreme as the one that was actually observed, assuming that the null hypothesis is true. This study used the 95 percent confidence level, and therefore a p-value of  $\leq 0.05$  indicates that the null hypothesis can be rejected (Theron, 2013).

<sup>15</sup> The t-value represents the regression coefficient divided by standard error. This study used the 95 percent confidence level, and therefore each t-value had to exceed  $-1.96 < t < +1.96$  (Diamantopoulos & Siguaw, 2000).

and t-value (96.16). This indicated that the slope of the regression of  $X_i$  on  $\xi_j$  in the fitted measurement model was substantial and significant (Diamantopoulos & Siguaw, 2000).

Figure 4.1 provides a graphic representation of the fitted measurement model.

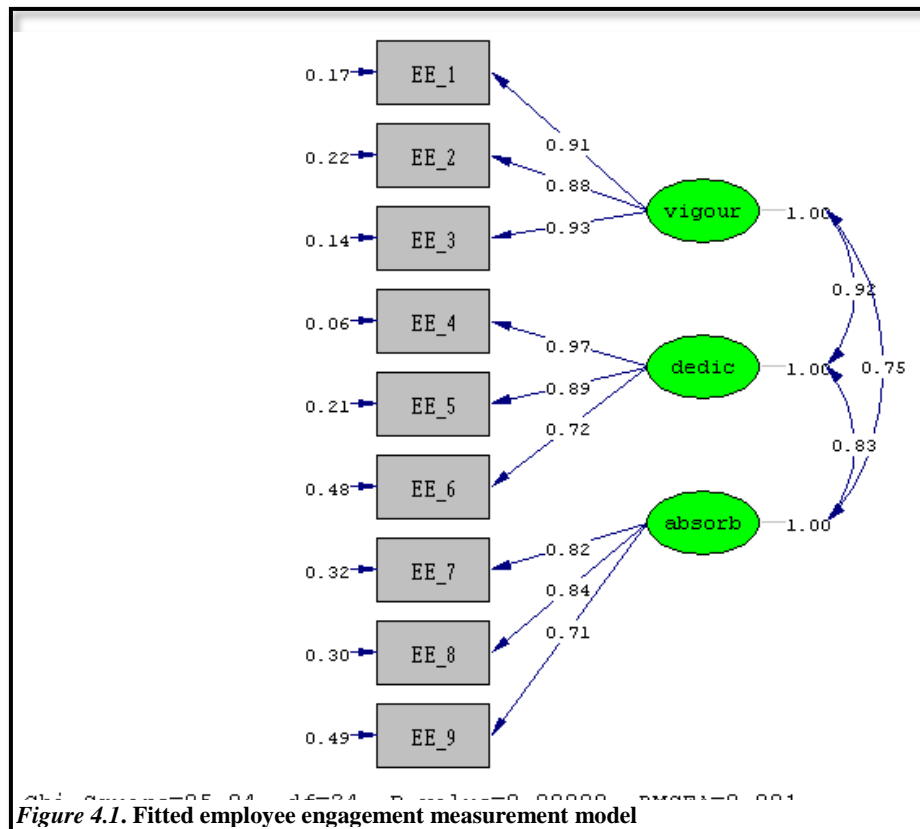


Figure 4.1. Fitted employee engagement measurement model

The amount of variance extracted<sup>16</sup> by each subscale included in the UWES-9 was satisfactorily high ( $> 0.50$ ). The absorption subscale extracted the smallest amount of variance (0.63). The vigour subscale extracted the highest amount of variance (0.82). These results were confirmed by the reported construct reliability values. The construct reliability of each subscale included in the measurement model was excellent ( $> 0.70$ ). The absorption subscale had the lowest construct reliability (0.83), while the vigour subscale had the highest construct reliability (0.93).

<sup>16</sup> Variance extracted signifies the amount of variance, in indicator variables, explained by the common factor. In accordance with Steenkamp and Van Trijp (1991, as cited in Janssens, Sefoko, Van Rooyen & Bostyn, 2006) values  $> 0.50$  indicated high validity for the variables in this study.

#### 4.2.2.2. Job crafting measurement model

Figure 4.2 shows a graphical representation of the fitted measurement model.

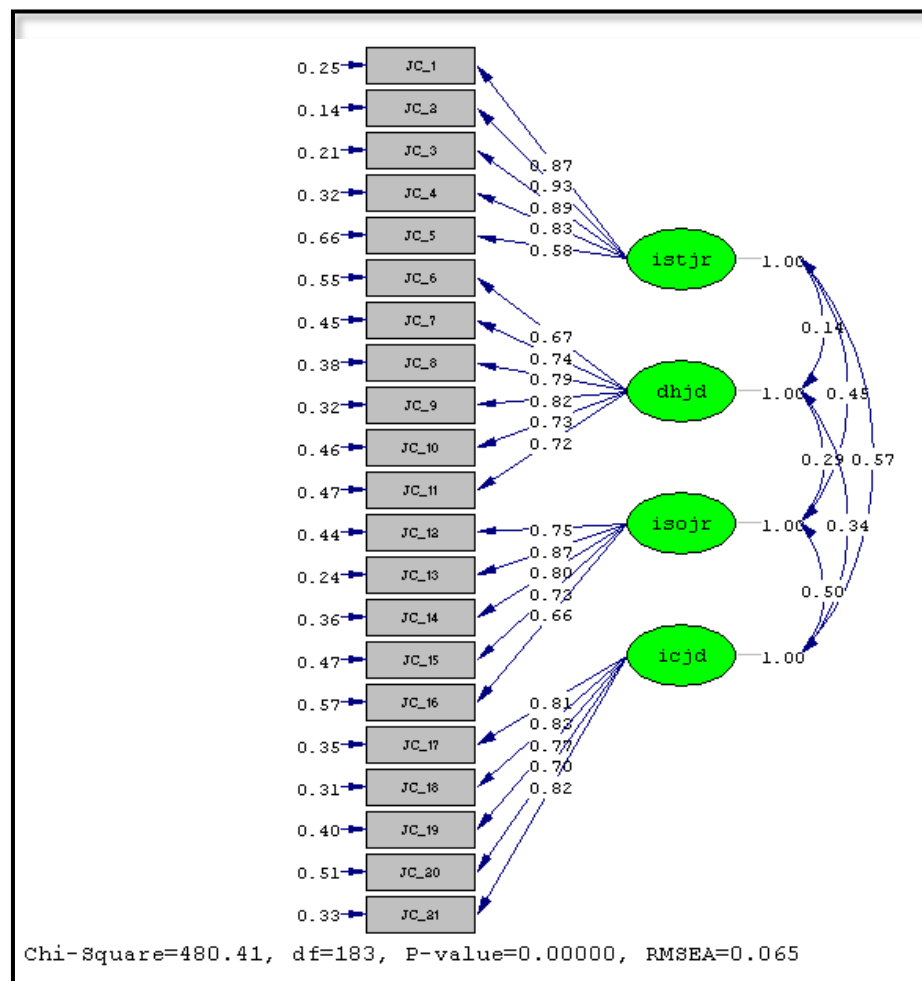


Figure 4.2. Fitted job crafting measurement model

The goodness-of-fit statistics revealed a Satorra-Bentler scaled chi-square value of 480.41 ( $p = 0.00$ ). Therefore, the null hypothesis of the exact model fit ( $RMSEA = 0.00$ ) was rejected. The employee engagement measurement model thus did not have the ability to reproduce the observed covariance matrix to a degree of accuracy explainable in terms of sampling error only. The P-value for test of close fit ( $RMSEA \leq 0.05$ ) = 0.00039 echoed these results. Therefore, the null hypothesis of the close model fit was also rejected.

The RMSEA value (0.065) showed reasonable fit ( $0.05 < RMSEA < 0.08$ ). However, this was not corroborated by the GFI value (0.97) and the AGFI value (0.97). These values supported good measurement model fit.

Each of the reported p-values was significant ( $p > 0.05$ ), and the t-values exceeded the critical cut-off values ( $-1.96 < t\text{-value} < +1.96$ ). Item JC-5 had the lowest regression coefficient



(0.58) and t-value (8.61). Item JC-2 had the highest regression coefficient (0.93) and t-value (38.13). This indicated that the slope of the regression of  $X_i$  on  $\xi_j$  in the fitted measurement model was substantial and significant (Diamantopoulos & Siguaw, 2000).

The amount of variance extracted by each of the subscales included in the Job Crafting Scale was satisfactorily high ( $> 0.50$ ). The decreasing hindering job demands subscale extracted the smallest amount of variance (0.56). The increasing structural job resources subscale extracted the highest amount of variance (0.68). These results were confirmed by the reported construct reliability values. The construct reliability of each subscale included in the measurement model was excellent ( $> 0.70$ ). The increasing social job resources subscale had the lowest construct reliability (0.87), while the increasing structural job resources subscale had the highest construct reliability (0.92).

#### **4.2.2.3. Turnover intention, proactive personality and meaningful work measurement model**

The goodness-of-fit statistics revealed a Satorra-Bentler scaled chi-square value of 277.41 ( $p = 0.00$ ). Therefore the null hypothesis of the exact model fit ( $RMSEA = 0.00$ ) was rejected. The measurement model thus did not have the ability to reproduce the observed covariance matrix to a degree of accuracy only explainable in terms of sampling error. The P-value for test of close fit ( $RMSEA \leq 0.05$ ) of 0.0017 echoed these results. Therefore the null hypothesis of the close model fit was also rejected.

The RMSEA value (0.067) showed reasonable fit ( $0.05 < RMSEA 0.08$ ). This was corroborated by the reported GFI value (0.92) and AGFI value (0.89).

Each of the reported p-values was significant ( $p > 0.05$ ), and the t-values exceeded the critical cut-off values ( $-1.96 < t\text{-value} < +1.96$ ). Item PP-5 had the lowest regression coefficient (0.53) and t-value (13.03), and item MW-5 had the highest regression coefficient (0.92) and t-value (93.33). This indicated that the slope of the regression of  $X_i$  on  $\xi_j$  in the fitted measurement model was substantial and significant (Diamantopoulos & Siguaw, 2000).

The amount of variance extracted by the Turnover Intention Scale (.60) and Psychological Meaningfulness Scale (.74) was satisfactorily high ( $> .50$ ). The Proactive Personality Scale extracted the smallest amount of variance (.45). This is not significantly below the .50 cut-off value. Therefore, it did not warrant any concern. These results were confirmed by the reported construct reliability values. The construct reliability of each latent variable scale included in the measurement model was excellent ( $> .70$ ). The Proactive Personality Scale

had the lowest construct reliability (.83), while the Psychological Meaningfulness Scale had the highest construct reliability (.94).

Figure 4.3 provides a graphical representation of the fitted measurement model.

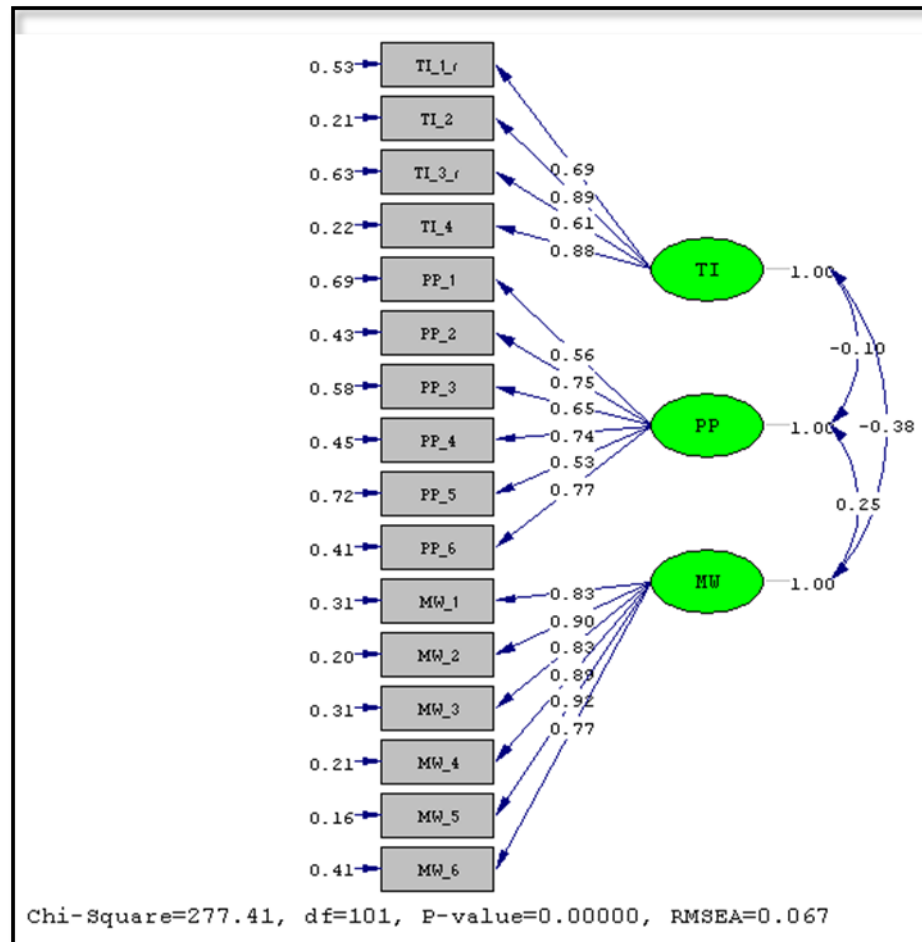


Figure 4.3. Fitted turnover intention, proactive personality and meaningful work measurement model

#### 4.2.2.4. Decision regarding measurement model fit

The purpose of the foregoing CFA was to evaluate the goodness-of-fit between the measurement model and the empirical data, before fitting the structural model. As illustrated above, three separate measurement models were tested in this study.

The basket of evidence reported showed that each measurement model<sup>17</sup> fits the empirical data reasonably well. The factor loadings of the indicator variables, included in the respective measurement models, were statistically significantly ( $p < 0.05$ ), and the t-values exceeded the critical cut-off values ( $-1.96 < t\text{-value} < +1.96$ ). Each scale (or subscale) extracted a satisfactorily high amount of variance and showed excellent construct reliability.

From the evidence it can be concluded that the operationalisation of the latent variables comprising the proposed structural model was successful. The researcher will be able to derive an unambiguous verdict when fitting the comprehensive LISREL model in the subsequent section.

### **4.3. TESTING THE STRUCTURAL MODEL**

#### **4.3.1. Fitting the comprehensive LISREL model**

According to Theron (2013), operationalising the latent variables of interest in the structural model creates two additional measurement models. The comprehensive LISREL model comprises the aforementioned measurement models and the structural model. This model specifies the hypothesised relationships between the latent variables depicted in the structural model (Hussey & Eagan, 2007). Before examining the strength and significance of relationships between latent variables and indicator variables, it is important to establish satisfactory model fit. This is done by testing the exact fit ( $RMSEA = 0.00$ ) and the close fit ( $RMSEA \leq 0.05$ ) null hypotheses. If acceptable fit is obtained, the researcher may commence with subsequent statistical analyses<sup>18</sup>.

The goodness-of-fit statistics revealed a Satorra-Bentler scaled chi-square value of 549.22 ( $p = 0.00$ ). Therefore, the null hypothesis of the exact model fit ( $RMSEA = 0.00$ ) was rejected. This means that the employee engagement measurement model did not have the ability to

---

<sup>17</sup> As mentioned previously, due to the large number of model parameters and restricted sample size, it was necessary to construct three separate measurement models to test all the model parameters. Three separate measurement models were constructed, namely the employee engagement measurement model, the job crafting measurement model, and the turnover intention, proactive personality and meaningful work measurement model.

<sup>18</sup> In terms of the model fit obtained for the measurement model included in the structural model, the results were similar to those discussed in Section 4.2.2. However, it is important to note that the amount of variance extracted by the decreasing hindering job demands subscale and the increasing social job resources subscale in the Job Crafting Scale was below 0.50 (Steenkamp & Van Trijp, 1991, as cited in Janssens et al., 2006). With reference to previous empirical evidence gathered in favour of these subscales (Section 3.6.6.), it is plausible that this may be attributed to the sample used in this study.

reproduce the observed covariance matrix to a degree of accuracy explainable in terms of sampling error only. The P-value for test of close fit ( $RMSEA \leq 0.05$ ) = 0.0016 echoed these results. Therefore the null hypothesis of the close model fit was also rejected.

The RMSEA value (0.062) showed reasonable fit ( $0.05 < RMSEA < 0.08$ ). However, this was not corroborated by the GFI value (0.89) and the AGFI value (0.86). These values indicated mediocre fit.

Figure 4.4 is a graphical representation of the fitted structural model.

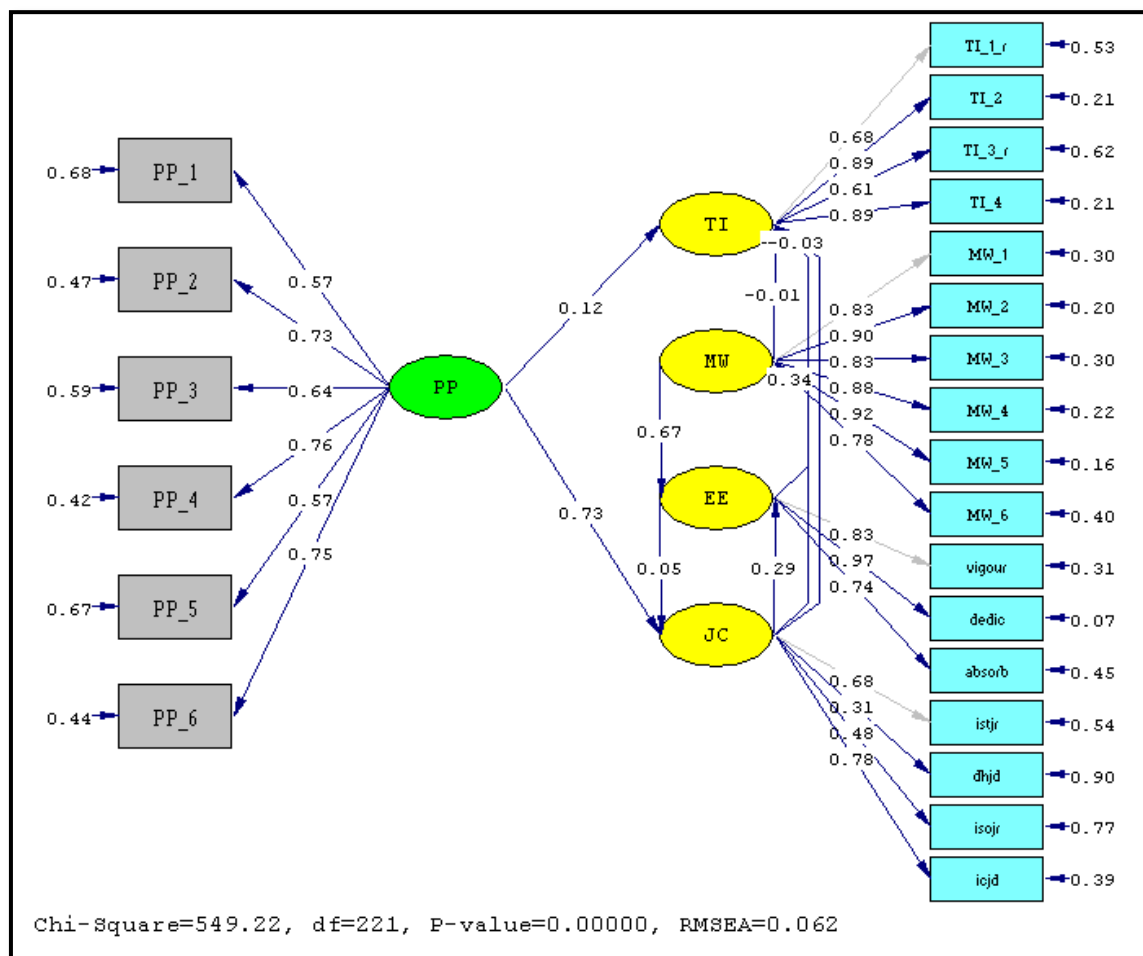


Figure 4.4. Fitted turnover intention and employee engagement structural model

#### 4.3.1.1. Decision regarding the structural model fit

The purpose of fitting the structural model was to evaluate the goodness-of-fit between the structural model and the empirical data before examining the strength and significance of the hypothesised relationships between the latent variables.

The results obtained from fitting the structural model illustrated that the structural model did not fit the empirical data exceptionally well. As reported, the GFI value and AFGI value

indicated mediocre fit. To ensure that the results obtained from the subsequent statistical analyses of the strength and significance of the hypothesised relationships between latent variables is accurate and consistent, the SEM results were supplemented with PLS path analysis (Section 4.4).

#### 4.3.2. Investigating path coefficients

After fitting the structural model, the reported path coefficients were investigated to determine the strength and significance of the hypothesised relationships between the latent variables. Table 4.2<sup>19</sup> presents the factor loadings obtained for the hypothesised relationships. The factor loadings indicated that four of the hypothesised relationships were not statistically significant.

**Table 4.2**

*Factor Loadings for Hypothesised Relationships*

Variable	EE	JC	MW	PP
<i>Turnover intention</i>	-.50**	-.03	-.01	.12
<i>Employee engagement</i>	-	.29**	.67**	-
<i>Job crafting</i>	.05	-	-	.73**
<i>Meaningful work</i>	-	.34**	-	-
<i>Proactive personality</i>	-	-	-	-

EE = Employee engagement; JC = Job crafting; MW = Meaningful work; PP = Proactive personality

As shown in Table 4.2, all the path coefficients were not statistically significant at the 95 percent confidence level. Only five of the reported p-values were statistically significant ( $p > 0.05$ ), and the t-values exceeded the critical cut-off values ( $-1.96 < t\text{-value} < +1.96$ ). In other words, the strength of the influence of  $\xi_j$  and/or  $\eta_j$  on  $\eta_i$  was substantial and significant for five of the hypothesised relationships.

The path coefficients obtained for the hypothesised impact of employee engagement on turnover intention (P-value = -0.50), job crafting on employee engagement (P-value = 0.29), job crafting on meaningful work (P-value = 0.34), meaningful work on employee engagement

<sup>19</sup> \*\*  $p < 0.05$  (statistically significant at the 95 percent confidence level)

(P-value = 0.67), and proactive personality on job crafting (P-value = 0.73) were statistically significant.

The path coefficients obtained for the hypothesised impact of employee engagement on job crafting (P-value = 0.05), job crafting on turnover intention (P-value = -0.03), meaningful work on turnover intention (P-value = -0.01), and proactive personality on turnover intention (P-value = 0.12) were not statistically significant. Research findings showed weak relationships between the aforementioned variables.

#### **4.3.2.1. Decision regarding path coefficients**

Path coefficients were investigated to determine the strength and significance of the hypothesised relationships between latent variables.

The abovementioned results indicated that all the path coefficients were not statistically significant at the 95 percent confidence level. Only five of the reported p-values were significant ( $p > 0.05$ ), and the t-values exceeded the critical cut-off values ( $-1.96 < t\text{-value} < +1.96$ ), which shows that the strength of the influence of  $\eta_j$  on  $\eta_i$  was substantial and significant for five of the hypothesised relationships.

The conclusion was drawn that hypotheses 1, 3, 5, 7 and 9 were statistically significant, while hypotheses 2, 4, 6 and 8 were not statistically significant.

#### **4.4. PARTIAL LEAST SQUARES PATH ANALYSIS**

Even though the structural model converged in LISREL 8.80, the goodness-of-fit statistics did not indicate exact or close model fit. As mentioned before, the GFI value and the AGFI value indicated mediocre fit. Consequently, the researcher decided to conduct PLS path analysis to determine the accuracy and consistency of the SEM results.

The original structural model, depicted in Figure 3.1, was revised before the commencement of PLS path analysis. The revised structural model, depicted in Figure 4.5, does not include the path pointing from employee engagement to job crafting<sup>20</sup>.

---

<sup>20</sup> Bidirectional paths cannot be tested in PLS path analysis. This implies that hypotheses 2 and 3 cannot be tested simultaneously within a single PLS model. Therefore, the path pointing from employee engagement to job crafting (hypothesis 2) was excluded from the revised turnover intention and employee engagement structural model. This exclusion was supported by the SEM results, which showed that the hypothesised impact of employee engagement on job crafting was not statistically significant.

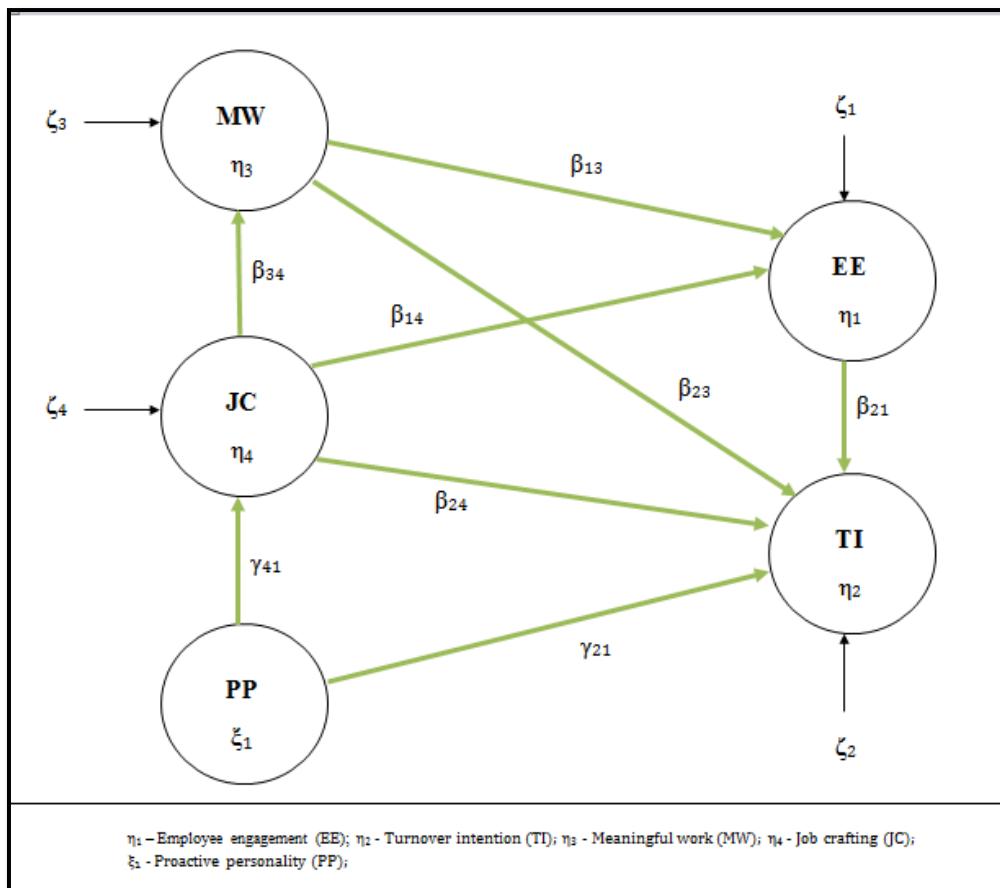


Figure 4.5. Revised turnover intention and employee engagement structural model

#### 4.4.1. Reliability analysis

Reliability analysis gave a preliminary indication of the value of the subsequent statistical analyses. Table 4.3 presents a summary of the reliability analysis conducted as part of the PLS path analysis. The composite reliability<sup>21</sup> ( $> 0.70$ ) and average variance extracted<sup>22</sup> ( $> 0.50$ ) obtained for each of the latent variable scales were satisfactorily high. This was corroborated by the reported R square values. It therefore was concluded that the inner-model measurement fit was satisfactorily high. Each latent variable scale measured the constructs it was assigned to measure.

<sup>21</sup> The composite reliability value measures the reliability of the latent variable scales. In this study, values  $> 0.70$  indicate that the latent variable scales have excellent reliability.

<sup>22</sup> The average variance extracted (AVE) value measures the amount of variance, in indicator variables, explained by the common factor (Diamantopoulos & Siguaw, 2000). In this study, values  $> 0.50$  indicate that the latent variable scales do not measure constructs that are theoretically unrelated (Farrell, 2010, as cited in Theron, 2013).

**Table 4.3***Reliability Statistics for the PLS Path Model*

Scale	Average variance extracted (AVE)	Composite reliability (inner model)	R square (outer model)
<i>EE</i>	.81	.93	.57
<i>TI</i>	.69	.90	.21
<i>MW</i>	.78	.95	.11
<i>JC</i>	.49	.79	.35
<i>PP</i>	.54	.87	.00

EE = Employee engagement; TI = Turnover intention; MW = Meaningful work; JC = Job crafting; PP = Proactive personality

The composite reliability of each latent variable scale included in the self-administered web-based survey was excellent ( $> 0.70$ ). The Job Crafting Scale had the lowest composite reliability (0.79). The Psychological Meaningfulness Scale had the highest composite reliability (0.95).

The reported AVE values were satisfactorily high ( $> 0.50$ ), while the Job Crafting Scale extracted the smallest amount of variance (0.49). Considering that it is just below the 0.50 cut-off value, it did not warrant any concern. The UWES-9 extracted the highest amount of variance (0.81). These results were corroborated by the R square<sup>23</sup> values, which showed that the total model accounted for a satisfactorily high amount of variance in the latent variables of interest. Importantly, proactive personality was an exogenous variable and therefore obtained an R square value of zero. The Psychological Meaningfulness Scale obtained the lowest R square value (0.11), which indicates that the total model accounts for 11 percent of the variance observed in meaningful work. The UWES-9 obtained the highest R square value (0.57), which indicates that the total model accounts for 57 percent of the variance observed in employee engagement.

In addition, bootstrap analysis was conducted to determine the confidence intervals on the factor loadings. As mentioned previously, this study used the 95 percent confidence level.

<sup>23</sup> R square values are coefficients of determination used to measure the amount of variance in endogenous ( $\eta$ ) latent variables accounted for by the total model.



Therefore, the reliability of the items included in the latent variable scales was determined by evaluating whether zero falls within the 95 percent confidence interval. All the reported factor loadings were positive, and zero did not fall within the 95 percent confidence interval. This comments favourably on the reliability of each item included in the latent variable scales, as each factor loading is statistically significant.

#### **4.4.1.1. Decision regarding reliability**

The purpose of the foregoing reliability analysis was to provide insight into the functioning of each of the latent variable scales included in the self-administered web-based survey, and to establish the psychometric integrity of the indicator variables assigned to represent the latent variables.

The results of the abovementioned reliability analysis provide sufficient evidence in support of the item parcels discussed in Chapter 3 (Section 3.6). Each latent variable scale was found to be internally consistent and reliable. All the composite reliability scores were excellent ( $> 0.70$ ), which supported the reliability of the latent variable scales included in the self-administered web-based survey. These results were corroborated by satisfactorily high average inter-item correlations. Furthermore, the R square values showed that the total model accounted for a satisfactorily high amount of variance in the latent variables of interest, and factor loadings were positive, and zero did not fall within the 95 percent confidence interval.

The conclusion was drawn that the inner-model measurement fit was satisfactorily high, which indicated that each latent variable scale measured the constructs it was assigned to measure, and each item included in the latent variable scales as factor loadings is statistically significant. Therefore, subsequent statistical analyses were supported.

#### **4.4.2. Investigating path coefficients**

After establishing the reliability of each latent variable scale, path coefficients<sup>24</sup> were investigated to determine the strength and significance of the hypothesised relationships. Table 4.4 presents the factor loadings obtained for the hypothesised relationships. The outer-

---

<sup>24</sup> PLS path coefficients show the strength of the relationship hypothesised between the latent variables. Generally, PLS path coefficients range from -1.00 to +1.00. Values closer to zero in the 95 percent confidence interval indicate the absence of relationships between latent variables (Janse van Rensburg, 2010).

model measurement fit indicated that two of the hypothesised relationships were not statistically significant.

**Table 4.4**

*Factor Loadings Obtained for the PLS Path Model*

Path	PLS path coefficient	Bootstrap mean	95 % lower	95 % upper	Description
<i>EE</i> → <i>TI</i>	-0.35	-0.35	-0.48	-0.23	Significant
<i>JC</i> → <i>EE</i>	0.27	0.27	0.20	0.35	Significant
<i>JC</i> → <i>TI</i>	-0.07	-0.07	-0.18	0.04	Not significant
<i>JC</i> → <i>MW</i>	0.33	0.33	0.24	0.42	Significant
<i>MW</i> → <i>TI</i>	-0.14	-0.14	-0.26	-0.02	Significant
<i>MW</i> → <i>EE</i>	0.62	0.62	0.56	0.67	Significant
<i>PP</i> → <i>TI</i>	0.11	0.11	0.00	0.22	Not significant
<i>PP</i> → <i>JC</i>	0.59	0.60	0.53	0.66	Significant
EE = Employee engagement; TI = Turnover intention; MW = Meaningful work; JC = Job crafting; PP = Proactive personality					

As mentioned previously, this study used the 95 percent confidence level. Therefore the significance of the hypothesised relationships was determined by evaluating whether zero falls within the 95 percent confidence interval. On two occasions zero fell within this interval, which indicates that the hypothesised impact of job crafting on turnover intention (PLS path coefficient = -0.07), and of proactive personality on turnover intention (PLS path coefficient = 0.11), was not statistically significant. Research findings showed weak relationships between the aforementioned variables.

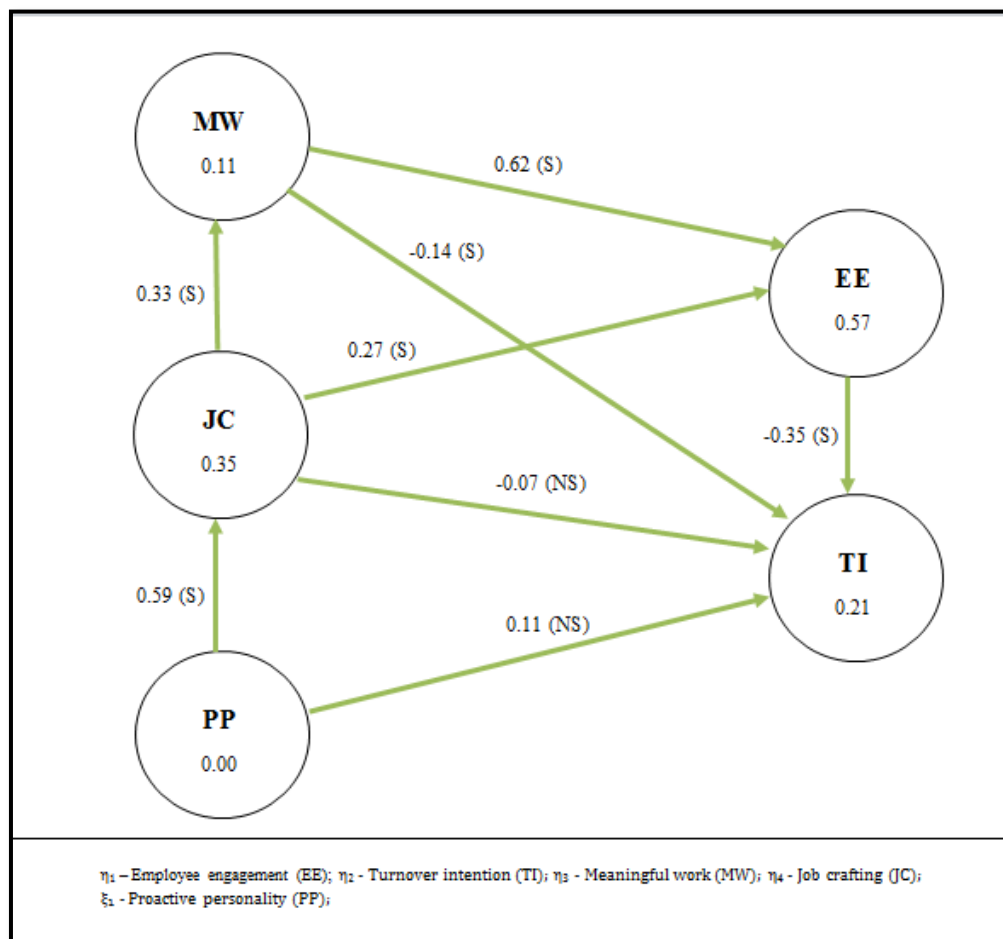
Fortunately, zero did not fall within the 95 confidence interval of the remaining hypothesised relationships. This indicates that the hypothesised impact of employee engagement and turnover intention (PLS path coefficient = -0.35), job crafting and employee engagement (PLS path coefficient = 0.27), job crafting and meaningful work (PLS path coefficient = 0.33),

meaningful work and turnover intention (PLS path coefficient =  $-0.14$ )<sup>25</sup>, meaningful work and employee engagement (PLS path coefficient =  $0.62$ ), and proactive personality and job crafting (PLS path coefficient =  $0.59$ ) were statistically significant.

#### 4.4.2.1. Decision regarding the path coefficients

Path coefficients were investigated to determine the strength and significance of the hypothesised relationships between the latent variables.

Figure 4.6 illustrates the significant and non-significant standardised path coefficients<sup>26</sup> in the revised turnover intention and employee engagement structural model.



**Figure 4.6.** PLS report for the revised turnover intention and employee engagement structural model

<sup>25</sup> Even though the hypothesised relationship between meaningful work and turnover intention is statistically significant, it is important to note that this relationship is very weak.

<sup>26</sup> (S) indicates significant paths and (NS) indicates non-significant path.

The abovementioned results indicated that all the path coefficients were not statistically significant at the 95 percent confidence level. Six of the reported PLS path coefficients were satisfactorily high, which is in favour of the hypothesised relationships. However, on two occasions zero fell within the 95 percent confidence interval, which indicated the absence of the hypothesised relationship.

The conclusion was drawn that hypotheses 1, 3, 5, 6, 7 and 9 were statistically significant, while hypotheses 4 and 8 were not found to be statistically significant<sup>27</sup>.

## 4.5. REPORTING AND INTERPRETING FINAL SCORES

### 4.5.1. Interpreting the employee engagement score

The UWES-9 (Schaufeli et al., 2006) was used to determine the extent to which employees employed by audit firms operating in the South African FSI were engaged in their work. The UWES-9 comprises three subscales, which served as a composite measurement indicator of employee engagement. Responses were scored on a seven-point Likert scale (0 = never; 6 = every day). None of the items was reverse scored.

Schaufeli and Bakker (2003) advise that the true meaning of scores obtained for any version of the UWES can be interpreted using the scoring template presented in Table 4.5.

**Table 4.5**

*Scoring Template for UWES Mean Scores*

Mean score	Mean
1 – feels engaged once a year or less	0.00 to 0.99
2 – feels engaged at least once a year	1.00 to 1.99
3 – feels engaged at least once a month	2.00 to 2.99
4 – feels engaged at least a couple of times a month	3.00 to 3.99
5 – feels engaged at least once a week	4.00 to 4.99
6 – feels engaged a couple of times per week or daily	5.00 to 6.00

<sup>27</sup> Hypothesis 2 was only tested in SEM. As mentioned previously, the path pointing from employee engagement to job crafting was not included in the revised turnover intention and employee engagement structural model.

The total mean score obtained for employee engagement was 3.92 (SD = 0.97), which indicates a level 4 employee engagement among employees employed by audit firms operating in the South African FSI. This implies that employees experience feelings of engagement at least a couple of times a month.

The following mean scores were obtained for each of the subscales included in the UWES-9:

- **Absorption:** The mean score obtained for the absorption subscale was 4.08 (SD = 1.04), indicating a level 5 employee engagement. This implies that, at least once a week, employees feel completely captivated by their work, having difficulty disengaging from their work after completing tasks.
- **Dedication:** The mean score obtained for the dedication subscale was 4.06 (SD = 1.10), which indicated a level 5 employee engagement. This implies that employees experience a strong sense of identification with and involvement in their work at least once a week. During these periods, employees are inspired by the significance and meaning associated with their work.
- **Vigour:** The mean score obtained for the vigour subscale was 3.61 (SD = 1.08), which indicated a level 4 employee engagement. This implies that, at least a couple of times each month, employees are willing to devote time and effort to their work. During these periods employees are characterised by high levels of energy and mental resilience, despite experiencing failure or facing challenging tasks.

Schaufeli and Bakker (2003) compared the levels of employee engagement in diverse professions. Their results indicated that the mean score obtained among blue-collar workers (3.63) and physicians (3.10) showed particularly low levels of employee engagement. In contrast, the scores obtained among farmers (4.24) and managers (4.14) were much higher. After comparing the reported mean score (3.92) obtained in this study to those reported by Schaufeli and Bakker (2003), the conclusion was drawn that employees employed by audit firms operating in the South African FSI lie just below high-scoring professions.

#### **4.5.2. Interpreting the turnover intention score**

The Turnover Intention Scale (Moore, 2000) was used to determine the probability that employees employed by audit firms operating in the South African FSI would quit their jobs in the foreseeable future. Responses were scored on a five-point Likert scale (1 = very unlikely; 5 = very likely). Two of the item scores were reverse scored (TOI-1; TOI-3).

The literature does not provide any specific instructions regarding the interpretation of scores obtained by the Turnover Intention Scale. Therefore, mean scores were categorised as low (.00 to 1.66), medium (1.67 to 3.33) and high (3.34 to 5.00) in this study.

The total mean score obtained for turnover intention was 2.66 (SD = 1.12), which indicates that employees employed by audit firms operating in the South African FSI have a medium level of turnover intention. This implies that a reasonable number of these employees contemplate alternative employment opportunities.

#### **4.5.3. Interpreting the meaningful work score**

The Psychological Meaningfulness Scale (May et al., 2004) was used to determine the degree of meaning employees employed by audit firms operating in the South African FSI find in their work-related activities. Responses were scored on a five-point Likert scale (1 = strongly disagree; 5 = strongly agree). None of the items were reverse scored.

The literature does not provide any specific instructions regarding the interpretation of scores obtained by the Psychological Meaningfulness Scale. Therefore, mean scores were categorised as low (0.00 to 1.66), medium (1.67 to 3.33) and high (3.34 to 5.00) in this study.

The total mean score obtained for meaningful work was 3.89 (SD = 0.82), which indicates that employees employed by audit firms operating in the South African FSI perceive a high level of meaning in their work. This implies that most employees perceive their work as significant, valuable and worthwhile.

#### **4.5.4. Interpreting the job crafting score**

The Job Crafting Scale (Dutch translation) (Tims et al., 2012) was used to determine the extent to which employees employed by audit firms operating in the South African FSI engage in job-crafting behaviour. The Job Crafting Scale comprises four subscales, which served as a composite measurement indicator of job-crafting behaviour. Responses were scored on a five-point Likert scale (0 = never; 6 = very often). None of the items was reverse scored.

The literature does not provide any specific instructions regarding the interpretation of scores obtained by the Job Crafting Scale. Therefore, mean scores were categorised as low (0.00 to 1.99), medium (2.00 to 3.99) and high (4.00 to 6.00) in this study.

The total mean score obtained for job crafting was 3.58 (SD = 0.51), which indicates that employees employed by audit firms operating in the South African FSI exhibit a medium

level of job crafting. This implies that a reasonable number of these employees engage in job-crafting behaviours.

The following mean scores were obtained for each of the subscales included in the Job Crafting Scale:

- **Increasing structural job resources:** The mean score obtained for the increasing structural job resources subscale was 4.32 (SD = 0.52), which indicates a high level of job crafting. This implies that employees take initiative resourcefully to increase variety, opportunity for development, and autonomy.
- **Increasing social job resources:** The mean score obtained for the increasing social job resources subscale was 3.74 (SD = 0.74), which indicates a medium level of job crafting. This implies that a reasonable number of employees take initiative to increase social support, supervisory coaching and feedback.
- **Increasing challenging job demands:** The mean score obtained for the increasing challenging job demands subscale was 3.42 (SD = 0.83), which indicates a medium level of job crafting. This implies that a reasonable number of employees increase job demands that prevent boredom and stimulate personal growth.
- **Decreasing hindering job demands:** The mean score obtained for the decreasing hindering job demands subscale was 2.96 (SD = 0.83), which indicates a medium level of job crafting. This implies that a reasonable number of employees take initiative to proactively lower job demands when they feel overwhelmed.

#### **4.5.5. Interpreting the proactive personality score**

The six-item Proactive Personality Scale (Dutch translation) (Claes et al., 2005) was used to determine the proactivity of employees employed by audit firms operating in the South African FSI. Responses were scored on a seven-point Likert scale (1 = strongly agree; 7 = strongly disagree). None of the items was reverse scored.

The literature does not provide any specific instructions regarding the interpretation of scores obtained by the six-item Proactive Personality Scale. Therefore, mean scores were categorised as low (0.00 to 2.33), medium (2.34 to 4.66) and high (4.67 to 7.00) in this study.

The total mean score obtained for turnover intention was 5.65 (SD = 0.82), which indicates that employees employed by audit firms operating in the South African FSI have a high level

of proactivity. This implies that most employees have a stable disposition to proactive behavioural responses.

#### 4.6. INTERPRETING THE PROPOSED HYPOTHESES

According to Terre Blanche, Durrheim and Painter (2006), causality between latent variables can only be inferred from the hypothesised models. Even though many researchers may argue that the results of SEM and PLS path analysis can provide statistical evidence of causal effects, this is not true. In the light of the aforementioned, the presented statistical findings were interpreted in terms of the hypotheses listed in Section 3.3.

**Hypothesis 1:** Employee engagement has a significant negative impact on turnover intention.

The hypothesised negative impact of employee engagement on turnover intention **was found to be statistically significant** in both SEM (P-value = -0.50) and PLS (PLS path coefficient = -0.35). This corroborated previous research endeavours that studied this relationship (e.g. Halbesleben, 2010; Mitchell et al., 2001; Towers Perrin, 2004). Therefore, as employees employed by audit firms operating in the South African FSI become more engaged in their work, they will be less prone to actively seek alternative employment opportunities. These employees' sense of commitment toward and investment in their current organisation discourage the development of turnover intentions.

**Hypothesis 2:** Employee engagement has a significant positive impact on job crafting.

The hypothesised negative impact of employee engagement on job crafting **was not found to be statistically significant** in SEM (P-value = 0.05)<sup>28</sup>. The research findings showed a weak negative relationship between the aforementioned variables. Even though joyful and enthusiastic employees (engaged employees) have the ability to integrate diverse ideas and come up with novel solutions (Fredrickson, 2001) this does not necessarily imply that these will be exhibited in job-crafting behaviours. In other words, the characteristically high energy

---

<sup>28</sup> Hypothesis 2 was only tested in SEM. As mentioned previously, the path pointing from employee engagement to job crafting was not included in the revised turnover intention and employee engagement structural model.



levels and proactive behavioural responses associated with engaged employees do not always encourage job crafting.

Notably, the hypothesised positive impact of job crafting on employee engagement was found to be statistically significant in both SEM (P-value = 0.29) and PLS (PLS path coefficient = 0.27). This implies that the relationship between job crafting and employee engagement is unidimensional. While job crafting has a positive impact on employee engagement, engaged employees do not exhibit job-crafting behaviours. It is plausible that people employed by audit firms operating in the South African FSI who are engaged in their work do not have the need to craft their already satisfying jobs.

***Hypothesis 3:*** Job crafting has a significant positive impact on employee engagement.

The hypothesised positive impact of job crafting on employee engagement **was found to be statistically significant** in both SEM (P-value = 0.29) and PLS (PLS path coefficient = 0.27). This corroborated previous research endeavours that studied this relationship (e.g. Bakker et al., 2012; Petrou et al., 2012; Tims et al., 2012; Wrzesniewski et al. 2013). Therefore, as employees are able to improve the alignment between their jobs and their personal passions, preferences and motives (through job-crafting behaviours), they become more engaged in their jobs.

***Hypothesis 4:*** Job crafting has a significant negative impact on turnover intention.

The hypothesised negative impact of job crafting on turnover intention **was not found to be statistically significant** in SEM (P-value = -0.03) or PLS (PLS path coefficient = -0.07). In both instances the research findings showed a weak negative relationship between the aforementioned variables. Even though employees are able to improve the alignment between their jobs and their personal passions, preferences and motives (through job-crafting behaviours) and become more satisfied with their jobs, this does not necessarily mean that they are less prone to the development of turnover intentions.

The results of the PLS path analysis showed that the Turnover Intention Scale obtained an R square value of 0.21, which indicates that the total model accounts for 21.00 percent of the variance observed in turnover intention. Job crafting does not account for any of the variance extracted by the total model. This implies that variables that were not explored by this study account for variance in turnover intention among employees employed by audit firms operating in the South African FSI.

It could be that employee engagement mediates the relationship between job crafting and turnover intention. As mentioned previously, the positive impact of job crafting on employee engagement, as well as the negative impact of employee engagement on turnover intention, was found to be statistically significant in both SEM and PLS.

***Hypothesis 5:*** Job crafting has a significant positive impact on meaningful work.

The hypothesised positive impact of job crafting on meaningful work **was found to be statistically significant** in both SEM (P-value = 0.34) and PLS (PLS path coefficient = 0.33). This corroborated previous research endeavours that studied this relationship (e.g. Bakker et al., 2012; Hackman & Oldham, 1980; Petrou et al., 2012; Tausky, 1995; Tims et al., 2012). Therefore, engaging in either one of the three forms of job crafting outlined by the scholarly research (i.e. task crafting, relational crafting and cognitive crafting) enhances the extent to which employees employed by audit firms operating in the South African FSI perceive their work-related activities as meaningful.

***Hypothesis 6:*** Meaningful work has a significant negative impact on turnover intention.

The hypothesised negative impact of meaningful work on turnover intention **was not found to be statistically significant** in SEM (P-value = -0.01). The SEM results showed a weak negative relationship between the aforementioned variables. In contrast, the PLS results showed that the hypothesised relationship was statistically significant (PLS path coefficient = -0.14).

The PLS path analysis results showed that the Turnover Intention Scale obtained an R square value of 0.21, which indicates that the total model accounts for 21 percent of the variance observed in turnover intention. Meaningful work accounts for a small percentage of the variance extracted by the total model. This implies that variables that were not explored by this study account for greater amounts of variance in turnover intentions among employees employed by audit firms operating in the South African FSI.

Still, while the PLS results corroborated previous research endeavours that studied this relationship (e.g. Deloitte, 2011; Steger et al., 2012; Swart et al., 2012; Wright & Bonett, 1992) the SEM results did not support the statistical significance of the hypothesised relationship. Perhaps employee engagement mediates the relationship between meaningful work and turnover intention. As mentioned previously, the positive impact of meaningful

work on employee engagement, as well as the negative impact of employee engagement on turnover intention, was found statistically significant in both SEM and PLS.

**Hypothesis 7:** Meaningful work has a significant positive impact on employee engagement.

The hypothesised positive impact of meaningful work on employee engagement **was found to be statistically significant** in both SEM (P-value = 0.67) and PLS (PLS path coefficient = 0.62). This corroborated previous research endeavours that studied this relationship (e.g. Kock, 2010; May et al., 2004; Olivier & Rothmann, 2007; Stringer & Broverie, 2007, as cited in Steger et al., 2013; PeopleMetrics, 2011). Therefore, employees employed by audit firms operating in the South African FSI who perceive their work to be significant, valuable and worthwhile are likely to be engaged in their work. As explained by Aktouf (1992) and Rothmann and Hamukang'andu (2013), these employees are able to invest themselves entirely and engage fully with their work.

**Hypothesis 8:** Proactive personality has a significant positive impact on turnover intention

The hypothesised positive impact of proactive personality on turnover intention **was not found to be statistically significant** in SEM (P-value = 0.12) or PLS (PLS path coefficient = 0.11). In both instances, the research findings showed a weak positive relationship between the aforementioned variables. This implies that employees employed by audit firms operating in the South African FSI who have proactive personalities are not necessarily more likely to develop turnover intentions. Instead of responding actively to the frustration associated with feelings of incongruence by developing turnover intentions, these employees may explore alternative solutions.

The results of the PLS path analysis showed that the Turnover Intention Scale obtained an R square value of 0.21, which indicates that the total model accounts for 21 percent of the variance observed in turnover intention. Proactive personality does not account for any of the variance extracted by the total model. This implies that variables that were not explored by this study account for the variance in turnover intention among employees employed by audit firms operating in the South African FSI.

It could be that employees who have proactive personalities respond to the frustration associated with feelings of incongruence by crafting their jobs to improve the alignment

between their jobs and their personal passions, preferences and motives. As mentioned previously, the positive impact of proactive personality on job crafting was found to be statistically significant in both SEM and PLS.

**Hypothesis 9:** Proactive personality has a significant positive impact on job crafting.

The hypothesised positive impact of proactive personality on job crafting **was found to be statistically significant** in both SEM (P-value = 0.73) and PLS (PLS path coefficient = 0.59). In contrast with the results obtained by Vreugdenhil (2012), employees employed by audit firms operating in the South African FSI who have proactive personalities are more likely to exhibit job-crafting behaviours. Rather than passively receiving environmental presses, these employees make use of the opportunity to design their own job from the bottom up (through job-crafting behaviours).

#### 4.7. SUMMARY

The purpose of this chapter was to present and discuss the statistical results of the various analyses performed in this research study. Firstly, the measurement model was validated by conducting item analysis and CFA. Thereafter, the structural model was tested and path coefficients were investigated. Lastly, before the final scores and hypothesised relationships were interpreted, supplementary PLS path analysis was conducted.

The rationale behind performing the PLS path analysis was to determine the accuracy and consistency of the SEM results. As mentioned previously, the structural model did not fit the empirical data exceptionally well (mediocre fit). Interestingly, despite the reported low GFI (0.89) and AGFI value (0.86), the SEM and PLS path analysis results were highly similar. The only discrepancy detected was disagreement regarding the rejection of hypothesis 6. The SEM results indicated that the hypothesised negative impact of meaningful work on turnover intention was not statistically significant (P-value = -0.01). However, the PLS results proved otherwise (PLS path coefficient = -0.14).

The next chapter will outline the limitations of this study, as well as provide recommendations for future research endeavours. Furthermore, the managerial implications of the research findings and recommend practical interventions will be discussed.

## **CHAPTER 5**

### **IMPLICATIONS, LIMITATIONS AND RECOMMENDATIONS**

#### **5.1. INTRODUCTION**

Within modern organisations, turnover intention and employee disengagement are equally concerning global trends across industries. The research findings, discussed in Chapter 4, shed light on the seriousness of these trends among employees employed by audit firms operating in the South African FSI. To assist South African industrial psychologists in addressing the presented problem, this chapter will outline the managerial implications of the research findings and recommend practical interventions. Furthermore, the limitations of the study and recommendations for future research endeavours will be discussed to ensure that further fruitful research is conducted in the field of industrial psychology in South Africa.

#### **5.2. MANAGERIAL IMPLICATIONS**

The research findings, discussed in Chapter 4, showed that employees employed by audit firms operating in the South African FSI exhibit average levels of turnover intention and employee engagement. Accordingly, South African industrial psychologists should develop and implement interventions concentrated on the reduction of turnover intentions and enhancement of employee engagement.

Throughout the literature, countless antecedents of turnover intentions and employee engagement are mentioned. Only job crafting, meaningful work and proactive personality fall within the scope of this study. The reported PLS path analysis R square values of both turnover intention (0.21) and employee engagement (0.57) were satisfactorily high. This indicated that the total model accounted for a substantial amount of the variance observed in each of these latent variables. The conclusion can therefore be drawn that the latent variables included in the theoretical model, depicted in Figure 3.1, signify important avenues that industrial psychologists can pursue in order to reduce the turnover intentions and enhance the employee engagement of employees employed by audit firms operating in the South African FSI.

##### **5.2.1. Job crafting**

The hypothesised negative impact of job crafting on turnover intention was not found to be statistically significant (SEM = -0.03; PLS = -0.07). In both instances, the research findings showed a weak negative relationship between the aforementioned variables. However, SEM

(P-value = 0.29) and PLS (PLS path coefficient = 0.27) confirmed the statistical significance of the positive impact that job crafting has on employee engagement, which in turn has a negative impact on the development of turnover intentions (SEM = -0.50; PLS = -0.35). It therefore can be concluded that, in order to reduce turnover intention and enhance employee engagement among employees employed by audit firms operating in the South African FSI, industrial psychologists should encourage job-crafting behaviours.

As mentioned previously, job crafting allows employees to create an optimal work situation for themselves. While historical top-down job design processes did not allow employees to design their own jobs, job crafting is omnipresent in modern organisations (Berg et al., 2010). Importantly, besides job design processes there are a number of other antecedents that encourage job-crafting behaviours among employees. According to Petrou (2013), these antecedents can be separated into individual differences (i.e. personality disposition and self-efficacy), as well as contextual factors (i.e. job design, team processes, leadership, and organisational culture). Developing and implementing interventions in terms of these antecedents may enhance the prevalence of job crafting among employees employed by audit firms operating in the South African FSI.

#### **5.2.1.1. Individual differences**

- **Personality dispositions:** Personality dispositions do affect employees' willingness to engage in job-crafting behaviours. In particular, scholars have studied the relationship between proactive personality and job crafting. As shown in this study, employees who have a proactive personality disposition are more prone to engage in job crafting than their counterparts. Relatively unconstrained by situational factors (Yousaf et al., 2013), they take action to effect environmental change and challenge the status quo (Morrison & Milliken, 2000).

To increase the probability of employing employees with proactive personalities, industrial psychologists should modify selection processes (e.g. Gu et al., 2013; Unsworth & Parker, 2003; Yousaf et al., 2013). This involves extending the existing selection criteria beyond technical skills to include personality traits that contribute to job crafting (e.g. proactive personality disposition) (Ghitulescu, 2006).

- **Self-efficacy:** Self-efficacy refers to employees' beliefs that they are able and empowered to effect change (Baumeister & Vohs, 2002; Rigotti, Schyns & Mohr, 2008). According to Tims and Bakker (2010), self-efficacious employees are more

likely to engage in job crafting than their counterparts. With reference to Bandura's original work, these employees' positive self-image (Lyons, 2008) motivates them to act as change agents in their work environment (Bandura, 1982; Baumeister & Vohs, 2002; Gecas, 1991; Ghitulescu, 2006; Tims & Bakker, 2010).

Employees' self-efficacy can be increased through guided experience, mentoring and role modelling. Therefore, industrial psychologists should encourage managers to exemplify self-efficacious behaviour and act as a role model for employees. In addition, with the assistance of the human resource department, industrial psychologists can develop and implement training and development opportunities for all employees. This may enhance their level of work-related self-efficacy.

#### **5.2.1.2. Contextual factors**

- **Job design:** Job design, in particular autonomy, affects employees' willingness to engage in job-crafting behaviours. Researchers suggest that autonomy is a precondition for job crafting (e.g. Berg et al., 2007, 2010; Ilgen & Hollenbeck, 1992; Parker, Wall & Jackson, 1997; Warren, 2003, as cited in Ghitulescu, 2006; Staw & Boettger, 1990; Tims et al., 2013a; Wrzesniewski & Dutton, 2001). Autonomous employees' sense of personal agency (Keltner, Gruenfeld & Anderson, 2003) and perceived control (Lyons, 2008) motivate them to craft their jobs creatively (Amabile et al., 1994).

To enhance employees' autonomy, Lee (2008) advises that industrial psychologists should encourage managers to refrain from micromanaging employees. This author explains that managers should empower employees with responsibility for using their own judgment regarding the prioritisation, scheduling, and quality checking of their assigned tasks and duties. According to Lunenburg (2011), this is known as 'vertical loading'. Furthermore, industrial psychologists may consider introducing self-managed audit teams (Garfinkle, 2012).

- **Team processes:** Due to the complex nature of work in modern organisations, work has become increasingly interdependent (Howard, 1995 and Ilgen, 1999, as cited in Humphrey, Nahrgang & Morgeson, 2007). Morin and Cherre (1999, as cited in Morin, 2008) mention that employees have to rely on other individuals for information, aid and resources. Unfortunately, the interdependent nature of modern organisations detracts from employees' autonomy (Kiggundu, 1983; Lee & Tiedens,



2001). Employees need to consider the impact their job crafting will have on others (Scott, 1987, as cited in Ghitulescu, 2006). This discourages job-crafting behaviours among employees (Ghitulescu, 2006; Tims & Bakker, 2010; Tims et al., 2013b; Wrzesniewski & Dutton, 2001).

In general, employees employed by audit firms operating in the South African FSI function as part of audit teams. Considering that this may diminish job-crafting behaviours, industrial psychologists should encourage managers to assign specific tasks and duties to each team member. Even though extensive job crafting will not be possible, this will enable employees to craft their jobs within the boundaries of their assigned tasks and duties.

- **Leadership:** Job crafting does not suggest that employees alone are responsible for job design (Tims et al, 2013a). Numerous scholars advocate that organisational leadership influences the extent to which employees are willing to engage in job-crafting behaviours (e.g. Berg et al., 2010; Deci, Connell & Ryan, 1989; Tims et al, 2013b). Berg et al. (2010) highlight that employees should feel supported by processes that aim to minimise factors that restrict job crafting. Appropriate leadership strategies can be used to identify the factors and implement corrective processes.

Wrzesniewski and Dutton (2001) advise that industrial psychologists should encourage managers to inform employees about relevant job-crafting strategies and inspire them to take initiative (Anderson & West, 1998 and Gilso & Shalley, 2004, as cited in Ghitulescu, 2006). In addition, Tims et al. (2013b) suggest that managers should communicate and provide goals in such a way that employees are guided towards job crafting. This can be achieved by managers facilitating and communicating the desired changes directly to employees (Berg et al., 2010).

- **Organisational culture:** To encourage job crafting among employees, a positive organisational culture, characterised by psychological safety and trust, should be cultivated (Berg et al., 2010; Ghitulescu, 2006). Job crafting is fundamentally concerned with resourcefulness. According to Berg et al. (2010) and Boe (2012), when employees feel psychologically safe in the workplace and are trusted to change the status quo, they are more resourceful than their counterparts. Ghitulescu (2006)



confirms that employees are comfortable taking the risks associated with job crafting in non-threatening work environments.

Managers play an important role in the creation of a positive organisational climate that is conducive to job crafting. Ghitulescu (2006) underscores the importance of supportive leadership in the creation of a work environment characterised by psychological safety. Industrial psychologists should encourage managers to consistently recognise and reward employees' job-crafting efforts, irrespective of their outcome<sup>29</sup>. This may help cultivate a sense of psychological safety and trust between managers and employees.

### **5.2.2. Meaningful work**

Even though the hypothesised negative impact of meaningful work on turnover intention was only found to be statistically significant in PLS (PLS path coefficient = -0.14), both SEM (P-value = 0.67) and PLS (PLS path coefficient = 0.62) confirmed the statistical significance of the positive impact that meaningful work has on employee engagement. This, in turn, has a negative impact on the development of turnover intentions (SEM = -0.50; PLS = -0.35). It therefore can be concluded that, in order to reduce turnover intention and enhance employee engagement among employees employed by audit firms operating in the South African FSI, industrial psychologists should develop and implement interventions that enhance the meaningfulness of employees' work-related activities.

As mentioned previously, meaningful work comprises three dimensions: job characteristics (the set of tasks and duties formally assigned to employees), the relational architecture of a work environment (the social relationships with superiors, peers, subordinates and client) (Salancik & Pfeffer, 1978) and work-related cognitions (Roberson, 1990, as cited in Wrzesniewski & Dutton, 2001). There are scholars who distinguish between the meaningfulness of work and meaningfulness at work (Pratt & Ashforth, 2003). The meaningfulness of work is determined by work-related activities. In contrast, supervisor, colleague and client relations affect employees' meaningfulness at work. This study concentrated on the meaningfulness of work.

---

<sup>29</sup> This does not include job-crafting behaviours that may have serious damaging effects on the employees themselves, the organisation or their colleagues.

Countless researchers mention that job design affects the meaning of work (e.g. Hammuda & Dulaimi, 1997, as cited in Bowen, Cattell, Distiller & Edwards, 2008; Kahn, 1990; Ketchum & Trist, 1992; Pratt & Ashforth, 2003). Therefore, industrial psychologists should consider which modifications can be made to employees' tasks and duties to enhance the meaningfulness of their work (Delery & Shaw, 2001; Lepak & Snell, 1999; Morris & Venkatesh, 2010). Hall (2000) confirms that changing aspects of the job design (i.e. task significance, autonomy, skill variety, task identity, clear work-role definitions, challenging work, continuous learning, equitable rewards, clear goals, and feedback) through job enrichment is a feasible avenue for industrial psychologists to pursue.

#### 5.2.2.1. Job design characteristics

- **Task significance:** Employees have the inherent need to contribute to the welfare and lives of others (Bremner & Carrière, 2011; Lips-Wiersma & Morris, 2009; Ros, Schwartz & Surkiss, 1999; Steger, 2009). To satisfy the latter, employees' work should involve a satisfactory amount of task significance (Morin, 2008; Morris & Venkatesh, 2010). Ayers, Miller-Dyce and Carlone (2008) agree. Tasks and duties that have social purpose enhance the meaningfulness of work (Stone & Gueutal, 1985; Morin & Cherre, 1999, as cited in Morin, 2008).

According to Morin and Gagné (2009), managers play an important role in highlighting the social utility and purpose of employees' work. Industrial psychologists should encourage managers to clarify what is expected of employees, and assist them in understanding how their hard work and effort contribute to the achievement of organisational goals, as well as to the welfare and lives of other people (Fairlie, 2011; Lips-Wiersma & Morris, 2009; Ros et al., 1999; Steger, 2009). This intervention is especially important during the induction of newly appointed employees.

- **Autonomy:** Autonomy denotes the extent to which employees are entrusted with certain tasks and duties (Morris & Venkatesh, 2010). By implication, autonomous employees are empowered by the freedom to make use of their own judgment (Bowie, 1998; Morin & Cherre, 1999, as cited in Morin, 2008; Thomas, 2000). According to Deems (1997, as cited in Chalofsky, 2003), autonomy plays an integral role in the meaningfulness of work. To enhance the meaningfulness of work, employees should be permitted to function autonomously (Chalofsky & Krishna, 2009; Humphrey et al.,

2007; Moriarty, 2009; Morin & Gagné, 2009; Murphy, 2013; Zheng, Li & Hou, 2011).

As mentioned before, Lee (2008) advises that managers should avoid micromanaging employees. Instead, this author proposes that industrial psychologists should encourage managers to empower employees with the responsibility of using their own judgment. Employees should be permitted to make decisions regarding the prioritisation, scheduling and quality checking of their assigned tasks and duties. This is known as ‘vertical loading’ (Lunenburg, 2011). In addition, Garfinkle (2012) suggests that industrial psychologists may consider introducing self-managed audit teams.

- **Skill variety:** Skill variety (vertical enrichment) involves the extent to which work consist of a number of different activities, procedures and processes (Morris & Venkatesh, 2010; Noefer, Stegmaier, Molter & Sonntag, 2009). This job design characteristic eliminates the boredom and monotony associated with work that requires employees to enact the same skills recurrently. A number of scholars have mentioned that skill variety enhances perceptions of meaningful work (e.g. Behson, Eddy & Lorenzet, 2000; Bremner & Carrière, 2011; Humphrey et al., 2007; Moriarty, 2009; Murphy, 2013; Ros et al. 1990; Zheng et al., 2011).

Skill variety can be enhanced through either job rotation or job enlargement. Job rotation entails giving employees the opportunity to utilise a variety of skills and perform different jobs. In contrast, job enlargement denotes combining work-related activities to enhance task complexity. Due to the highly specialised nature of employment in audit firms, job rotation might not be the most feasible avenue to pursue. Instead, industrial psychologists should consider broadening the scope of employees’ jobs (job enlargement). In other words, additional responsibilities should be added to employees’ existing tasks and duties.

- **Task identity:** Task identity concentrates on the extent to which a particular job allows employees to perform tasks and duties from start to finish (Morris & Venkatesh, 2010). Research conducted by Humphrey et al. (2007) underscores the importance of task identity. These authors explain that task identity helps employees identify the tangible results rendered upon the completion of their tasks and duties. As a result, employees are able to understand how their hard work and efforts contribute

to the effective functioning of the broader system of which they form part (organisational success). This makes work more meaningful (Bremner & Carrière, 2011).

According to Lunenburg (2011), the concept of 'natural grouping' is closely associated with the enhancement of task identity. Instead of instructing employees to perform selected elements of the 'whole job', this author advises that industrial psychologists should encourage managers to assign entire jobs to employees. This may prove challenging, as audit teams generally are under a great deal of pressure to audit their clients' financial records in a timely and accurate manner. A more feasible approach might involve assigning entire sections of the work to each team member.

- **Clear work-role definitions:** Work roles, including tasks and duties, should explicitly outline the role employees are expected to fulfil and which tasks and duties they are held responsible for (Zheng et al., 2011). Not only does this help managers hold employees accountable, but it also acknowledges that employees fulfil a specific, workable function in the organisation (Cicero & Pierro, 2007). This recognition of their contribution to the effective functioning of the broader system of which they form part (organisational success) enhances the meaningfulness of their work (Linley et al., 2010; Oien, 2012; Steger, 2009).

Generally, audit firms are characterised as highly structured work environments. In accordance with this, existing employees typically have clearly defined roles. This helps to ensure that they know and understand what is expected of them. To uphold this standard, industrial psychologists should take all reasonable action to ensure that newly appointed employees are subject to a suitable induction process. This may involve arranging structured meetings with employees to clarify their work roles.

- **Challenging work:** Challenging work (job complexity) denotes the degree to which employees find it difficult to complete their assigned tasks and duties. Many scholars advocate that work should challenge employees within reasonable bounds (e.g. Humphrey et al., 2007; Laurent, 2003; Morin, 2008; Morgeson & Humphrey, 2006; Noefler et al., 2009; Zheng et al., 2011), and explain that mentally challenging work that requires endurance is more meaningful to employees (Ayers et al., 2008; Gibson, Ivancevich, Donnely & Konopaske, 2009; Kahn, 1990; Murphy, 2013).

It is important to take cognisance of activation theory. This theory suggests that the relationships between job demands and job performance, as well as job satisfaction, are curvilinear (Gardner, 1986, Gardner & Gummings, 1988, Scott, 1966 and Baschera & Grandjean, 1979, as cited in Janssen, 2001). By implication, challenging work-related activities can only enhance the meaningfulness of work up to a certain point. An overwhelming amount of challenge detracts from the meaningfulness of work. Work should therefore be adjusted according to employees' professional capacity (Morin & Cherre, 1999, as cited in Morin, 2008).

Typically, audit teams are under a great deal of pressure to audit their clients' financial records in a timely and accurate manner. Work in audit firms inherently poses a mental challenge to employees and requires endurance. Therefore, industrial psychologists should take reasonable action to continuously monitor employees' ability to deal with work-related challenges. This is especially important during performance appraisal discussions. Whether work underwhelms or overwhelms employees, reasonable modifications should be made to change employees' work-related activities appropriately.

- **Continuous learning:** Learning is an inescapable part of everyday life (Morin, 2008). Maslow's levels of self-actualisation, Alderfer's growth levels and Herzberg's motivators (Bowen et al., 2008; Chalofsky & Krishna, 2009) illustrate that employees have an inherent need for personal growth and development to reach their full potential (self-actualisation). Exposure to continuous learning opportunities satisfies this need. As a result, the meaningfulness of work is elevated (Ayers et al., 2008; Bremner & Carrière, 2011; Chalofsky & Krishna, 2009; Lips-Wiersma & Wright, 2012; Morin & Gagné, 2009; Murphy, 2013).

With assistance from the human resource department, industrial psychologists should develop and implement training and development interventions for all employees. This will ensure that the entire workforce is exposed to continuous learning opportunities. According to Morin and Gagné (2009), this supports knowledge transference in the workplace, while at the same time addressing employees' needs for personal growth and development. In addition, industrial psychologists should encourage managers to provide employees with feedback on their development areas.

- **Equitable rewards:** Rewards entail any incentives employees receive upon the successful completion of their assigned tasks and duties (Adams, 1965, as cited in Fok, Hartman, Patti & Razek, 2000). More specifically, equitable rewards address the degree to which employees perceive these rewards as fair and reasonable. All employees want to be rewarded fairly (Sirota & Mischkind, 2006). The literature suggests that equitable rewards align work inputs with work outcomes, which in turn increases the meaningfulness of work (Fox, 1980, as cited in Harrison, 2008; Ros et al., 1999).

Industrial psychologists should encourage managers to recognise employees' hard work and efforts through the provision of equitable rewards. To ensure that work inputs are aligned with work outcomes, Morin and Gagné (2009) advise that managers should carefully identify which rewards are valued most by employees. Mujtaba and Shuaib (2010) affirm. Employees perceive rewards that satisfy their needs more equitable.

- **Clear goals:** Many researchers have underscored the importance of goal-setting (e.g. Humphrey et al., 2007; Kosciulek & Wheaton, 2003; Morgeson & Humphrey, 2006). According to these researchers, humans are inherently goal-orientated (Shamir, 1999). Setting goals for employees, or allowing them to set goals for themselves, nurtures this important part of basic human functioning. In addition, it assures the meaningfulness of their work (Ayers et al., 2008; Klinger, 1977; Ryff & Singer, 1998; Morin & Cherre, 1999, as cited in Morin, 2008; Pratt & Ashforth, 2003; Thomas, 2000).

Industrial psychologists should encourage managers to revise organisational goals quarterly (organisational level). Any adjustments made or information regarding their progress should be communicated to the entire workforce. Furthermore, audit teams should collaboratively set project goals (group level), and individual employees should set personal goals for themselves (individual level). The latter may involve setting developmental goals during annual performance appraisals.

- **Feedback:** Employees want to be knowledgeable about their progress (Fok et al., 2000; Humphrey et al., 2007; Noefer et al., 2009; Zheng et al., 2011). Feedback is used to communicate the measurement of their progress and inform employees about the proximity of their goals, and to compare employees' individual relative performance (Festinger, 1954, as cited in Vlosky & Aguilar, 2009). This confirms

employees' competency and highlights their developmental areas (Chu & Mondejar, 2011). Consequently, work becomes more meaningful (Humphrey et al., 2007; Murphy, 2013).

Industrial psychologists should encourage managers to provide employees with positive and constructive feedback (Zheng et al., 2011) on a regular basis regarding their performance (Fortgang, 1998, as cited in Goggin, 2000; Noefler et al., 2009; Oien, 2012). Feedback should be provided after the completion of each project, and during annual performance appraisals. It would also be possible to integrate 360 degree feedback into the performance appraisal process. In addition, employees should evaluate and monitor their own performance and assess the quality of their work at the end of each project.

### **5.2.3. Proactive personality**

The hypothesised positive impact of proactive personality on turnover intention was not found to be statistically significant (SEM = 0.12; PLS = 0.11). This implies that proactive personality does not pose a threat to employee retention. However, as mentioned previously, the hypothesised positive impact of proactive personality on job crafting was found to be statistically significant in both SEM (P-value = 0.73) and PLS (PLS path coefficient = 0.59). Job-crafting behaviour increases employee engagement (SEM = 0.29; PLS = 0.27), which in turn restricts the development of turnover intentions (SEM = -0.50; PLS = -0.35). Therefore the conclusion can be drawn that, in order to reduce turnover intention and enhance employee engagement among employees employed by audit firms operating in the South African FSI, industrial psychologists should encourage proactivity<sup>30</sup>.

Unsworth and Parker (2003, p. 178) explain that "proactivity is about being self-starting and change-oriented in order to enhance personal and organisational effectiveness". The theories of proactivity (e.g. Crant, 2000; Frese & Fay, 2001; Parker, 1999) distinguish between three categories of antecedents influencing proactivity among employees, namely individual differences (i.e. personality disposition, and knowledge, skills and abilities

---

<sup>30</sup> As mentioned throughout this study, the proactive personality represents a stable personality disposition. Industrial psychologists are unable to alter employees' personality dispositions. Therefore, industrial psychologists should develop and implement interventions that enhance proactivity.



(KSAs)), motivational forces (i.e. role-based motivation and externally-based motivation), and contextual factors (i.e. job design, job stressors, team processes, leadership, organisational culture and human resource practices) (Strauss & Parker, 2012). Considering that these antecedents interact with and moderate one another, it is most feasible to develop and implement interventions in each of the aforementioned categories.

#### 5.2.3.1. Individual differences

- **Personality dispositions:** Some employees have an inborn proactive personality disposition. As mentioned previously, these employees do not passively receive their environmental presses. Being relatively unconstrained by situational factors (Yousaf et al., 2013), they take action to effect environmental change and challenge the status quo (Morrison & Milliken, 2000). In other words, they are more prone to proactive behavioural responses than their counterparts (Gu et al., 2013; Strauss & Parker, 2012; Yousef et al., 2013).

Throughout the literature, scholars advise that industrial psychologists should modify selection processes in order to enhance the proactivity of their workforce (e.g. Unsworth & Parker, 2003; Gu et al., 2013; Yousaf et al., 2013). This involves extending the existing selection criteria beyond technical skills to include personality traits that contribute to proactivity (e.g. proactive personality disposition).

- **Knowledge, skills and abilities:** According to Unsworth and Parker (2003), knowledge, skills and abilities (KSAs) are probably the most important antecedents of variance in proactivity, which involves contextual knowledge and job-related KSAs. These authors explain that employees, who have a comprehensive understanding of the broader system of which they form part, as well as the aspects of their job, are more prone to exhibit proactive behavioural responses (Frese & Fay, 2001).

To ensure that employees are knowledgeable about the aspects of their job, industrial psychologists should take all reasonable action to ensure that suitably qualified candidates are recruited and selected. Furthermore, all newly appointed employees should be subject to a suitable induction process. During this process, employees should be informed of their contribution to organisational success, as well as important aspects of their assigned tasks and duties (Oien, 2012), to ensure that they comprehend the broader system of which they form part.



### 5.2.3.2. Motivating factors

- **Role-based motivation:** There are two types of role-based motivation that encourage proactivity (Parker, 2000). Firstly, flexible role orientations (Parker et al., 1997; Parker, Williams & Turner, 2006), which deviate from the ‘that’s not my responsibility’ mentality, facilitate proactive behavioural responses. Employees who exhibit these role orientations perceive broader problems as part of their responsibilities, thereby acknowledging the importance of proactive behavioural responses (Unsworth & Parker, 2003). Secondly, role breadth self-efficacy (RBSE) (Parker, 1998; Parker et al., 2006) also affects employees’ proactivity. Employees who feel capable of performing proactive tasks are generally more proactive than their counterparts (Bandura, 1997).

Generally, audit firms are characterised as highly structured work environments. Accordingly, existing employees typically have clearly defined roles. This is not conducive to proactivity among employees. Therefore it is important that industrial psychologists encourage managers to inspire employees to take responsibility for tasks and duties that fall outside the scope of their formal job descriptions (flexible role orientations) (e.g. asking employees to assist team members once they have completed their assigned tasks and duties). In addition, with assistance from the human resource department, industrial psychologists should develop and implement training and development interventions to assist employees who do not possess the KSAs required to perform their job competently, so that RBSE is enhanced.

- **Externally-based motivation:** Vroom (1964) explains that employees are more proactive if they feel compelled to exhibit proactive behavioural responses. In other words, recognising and rewarding employees’ proactive behaviours may encourage proactivity. Various scholars have reported that extrinsic rewards may encourage proactivity among employees when they operate as positive feedback (e.g. Garfinkle, 2012; Strauss & Parker, 2012).

Parker and Wu (in press) underscore the importance of appreciating employees’ proactive behaviour. Industrial psychologists therefore should encourage managers to consistently recognise and reward employees’ proactivity. Providing employees with positive feedback when they engage in proactive behaviours, even when these are

unsuccessful, reinforces the importance and value of proactivity. Rewards could involve monetary incentives such as raises, bonuses and benefits (Thomas, 2000).

#### 5.2.3.3. Contextual factors

- **Job design:** Job design represents one of the most important contextual factors that affect proactivity among employees, especially in relation to autonomy (Parker, 2003) and job complexity (Massimini & Carli, 1988). Numerous research studies have shown that job control (autonomy) and job complexity have a positive effect on employees' willingness to exhibit proactive behavioural responses (e.g. Frese et al., 2007; Grant & Ashford, 2008; LePine & Van Dyne, 1998; Parker et al., 2006).

As mentioned previously, Lee (2008) advises that, to enhance the autonomy of employees, managers should refrain from micromanaging employees. Garfinkle (2012) suggests that, if possible, managers should permit employees the freedom to take initiative without obtaining prior approval. Sloan and Pollak (2006, as cited in Slatten, Carson, Baker & Carson, 2013) agree that managers should not feel threatened or become defensive. Instead, they must acknowledge that two heads are better than one. Furthermore, industrial psychologists could consider introducing self-managed audit teams (Garfinkle, 2012).

- **Job stressors:** Research has shown that job stressors have a positive effect on proactivity among employees (Andrews & Farris, 1972; Fay & Sonnentag, 2000). Importantly, as mentioned before, the relationship between job stressors and proactivity is curvilinear (activation theory). In the absence of job stressors employees are not motivated to exhibit proactive behavioural responses. However, an overwhelming amount of job stressors can be equally debilitating. Ideally, a moderate amount of job stressors should be present to enhance employees' proactivity.

In general, audit teams are under a great deal of pressure to audit their clients' financial records in a timely and accurate manner. Working for an audit firm inherently entails a mental challenge for employees, and requires endurance. Therefore, reasonable action should be taken to continuously monitor employees' ability to deal with work-related challenges. This is particularly important during performance appraisal discussions. If found that work underwhelms or overwhelms employees, industrial psychologists should make modify employees' work-related activities within reasonable bounds.

- **Team processes:** Campbell (2000) directs attention to the importance of aligning expectations through information sharing. According to this author, properly aligning the expectations held by employees, managers and the institution encourages proactive behavioural responses. Employees who know and understand what is expected of them are more comfortable engaging in proactive, self-initiated actions. Employees want to have an expectation of what can happen (Oien, 2012), what they hope for, and what course of action they can take (Cicero & Pierro, 2007; Steger, 2009; Zheng et al, 2011).

Typically, audit firms are highly structured work environments. Accordingly, most existing employees have a fairly comprehensive understanding of the expectations held by managers and the institution. This helps to ensure that they know and understand what is expected of them, which in turn encourages proactivity. To uphold this standard, industrial psychologists should take reasonable action to ensure that all newly appointed employees undergo a suitable induction process. This may involve arranging structured meetings with employees to clarify their work roles.

- **Leadership:** A number of researchers have advocated that organisational leadership supports and facilitates effective and sustained proactivity (e.g. De Hartog & Belschak, 2012, Morrison & Phelps, 1999 and Rank et al., 2007, as cited in Strauss & Parker, 2012). Meta-analytical evidence gathered by laboratory studies confirms this notion (Ryan & Deci, 2000). Employees should feel comfortable to engage in proactive behaviours and be supported by appropriate leadership strategies. Garfinkle (2012) adds that managers should exhibit exemplary behavioural responses (proactivity behaviours).

To encourage proactivity among employees, industrial psychologists should encourage managers to exhibit proactive behaviours that the employees are expected to emulate (Garfinkle, 2012; Gu et al., 2013). In addition, as mentioned before, managers should consistently recognise and reward employees' proactivity. Providing employees with positive feedback when they engage in proactive behaviours, even when these are unsuccessful, reinforces the importance and value of proactivity. Rewards could involve monetary incentives such as raises, bonuses and benefits (Thomas, 2000).

- **Organisational culture:** A positive organisational climate fosters proactivity (LePine

& Van Dyne, 1998). Unsworth and Parker (2003) state that an organisational climate characterised by psychological safety and trust is invaluable. These authors explain that employees who feel psychologically safe and are trusted to challenge the status quo are more proactive than their counterparts (Unsworth & Parker, 2003). Garfinkle (2012) agrees that employees' proactivity is elevated in non-threatening work environments.

Managers play an important role in the creation of a positive organisational climate that is conducive to proactivity. Industrial psychologists should encourage managers to take all reasonable action to ensure that employees feel psychologically safe in their work environment. Furthermore, they consistently should recognise and reward employees' proactive behaviour, whatever the outcome (successful or unsuccessful)<sup>31</sup>. This may help cultivate feelings of openness and trust, which in turn will enhance the employees' proactivity (Grant, Gino & Hofmann, 2011; Unsworth & Parker, 2003).

- **Human resource practices:** Human resource practices affect proactivity in employees in two ways. Firstly, concentrating solely on the narrow aspects of task performance during performance monitoring processes may limit proactivity (Frenkel, Korczynski, Shire & Tam, 1999). Harackiewicz, Manderlink and Sansone (1984) and Lepper and Greene (1975) add that attempts to formally monitor, assess and reward proactive behaviours may undermine employees' proactivity. Secondly, training and development interventions may foster proactivity in employees (Frese & Fay, 2001).

To enhance employees' proactivity, performance monitoring should not focus only on narrow aspects of task performance. Instead, it should include a variety of work-related aspects. Importantly, industrial psychologists should not include proactivity in performance appraisal systems or in the compensation contingent (Harackiewicz et al., 1984; Lepper & Greene, 1975). With assistance from the human resource department, industrial psychologists should develop and implement training and development interventions to assist employees to develop the generic skills required for proactivity (e.g. change orientation, active coping skills, and work-related self-

---

<sup>31</sup> This does not include proactive behaviours that may have serious damaging effects on the employees themselves, the organisation or their colleagues.

efficacy) (Frese & Fay, 2001), as well as the social processes that underpin proactivity (e.g. communication, leadership development and teamwork) (Unsworth & Parker, 2003).

### **5.3. LIMITATIONS OF THE STUDY AND RECOMMENDATIONS**

This study does have a number of limitations. Importantly, these limitations do not detract significantly from the research findings discussed in Chapter 4. However, as mentioned previously, these limitations and recommendations for future research endeavours are outlined to ensure that further fruitful research is conducted in field of industrial psychology in South Africa.

First, a sample of 391 employees employed by audit firms operating in the South African FSI participated in this study. Even though the sample size was satisfactorily large (the SEM model converged), some scholars may express concern regarding the reported response rate (48.87 percent) and average age of the individual participants (26.53 years)<sup>32</sup>. These two factors may have a negative impact on the generalisability of the research findings. Increasing employees' response rates in future research endeavours may prove challenging, considering the organisational time constraints (limited time for data collection and research endeavours) faced by audit firms operating in the South African FSI. However, future researchers are advised to include cohorts of young and old employees in their sample group.

Furthermore, the individual participants in this study were well-educated, white-collar employees. Researchers such as Ghitulescu (2006), Lyons (2008) and Wrzesniewski et al. (2001) mention that well-educated employees are more likely to engage in job crafting because they generally hold higher positions at work. Therefore, replicating this study in a sample of blue-collar employees in other industries in South Africa may prove insightful.

The second limitation of this study involved the self-report data collected by the measurement instruments included in the self-administered web-based survey. Unfortunately, self-report data is frequently influenced by social desirability (method bias). The possibility exists that individual participants may have responded to questions in a way that would create

---

<sup>32</sup> The majority of the employees included in the sample group of this study were audit interns who had recently graduated from university.

a more favourable impression of themselves (Podsakoff, MacKenzie, Lee & Podsakoff, 2003). As a result, the reported levels of latent variables investigated in this study may not have been reflected accurately in the reported research findings.

Importantly, the researcher did take reasonable action to restrict the negative impact associated with the second limitation of this study. Firstly, data collection was anonymous. Secondly, the scale anchors of the latent variable scales were different. Thirdly, to encourage authentic participation, none of the questions included in the self-administered web-based had a 'right' or 'wrong' answer. Fourthly, item analysis was conducted to establish the psychometric integrity of the indicator variables assigned to represent the latent variables. Still, future researchers are advised to obtain observer ratings or use objective measures. These propositions notable are not without disadvantages. Parker (2000) mentions that observational bias and egocentric bias may have a negative impact on the validity and reliability of observer ratings and objective measures.

Interestingly, the confidentiality aspect of self-administered web-based surveys signifies another limitation of this study. Even though individual participants were assured of confidentiality, it is possible that they mistrusted the confidentiality clause outlined in the informed consent document. As a result, this could have had a negative impact on the authenticity of their responses.

Third, this study took a 'snapshot' of the studied phenomenon (cross-sectional research study), which prevents the researcher from drawing causal conclusions (Taris & Kompier, 2006). To enhance the accuracy and consistency of the reported research findings, it might be feasible to conduct a longitudinal study with multiple time waves or a diary design. Not only will this enable the researcher to draw more definitive causal conclusions, but also to identify recurring behavioural patterns among employees employed by audit firms operating in the South African FSI, as well as changes over time.

The use of an ex post facto research design represents the fourth limitation of this study. Kerlinger (1973) advises that results obtained from an ex post facto design should be handled with caution. As mentioned previously, the ex post facto design does not allow the researcher to manipulate the independent variables. Consequently, the researcher did not have the power to randomise (Kerlinger & Lee, 2000).

Fifth, this study intended to investigate contemporary concepts. No extensive research has been conducted regarding turnover intention and employee engagement among employees

employed by audit firms operating in the South African FSI. Consequently, scholarly research pertaining to this subject matter was scarce. While theoretically sound justifications support the hypothesised relationships between the latent variables included in this study, future research endeavours need to investigate similar relationships within the South African FSI. Replicating the reported research findings may increase scholars' confidence in their reliability and validity.

All the reported PLS path analysis R square values were satisfactorily high (ranging from 0.11 to 0.57). Nevertheless, it is plausible that there are important predictors of turnover intention and employee engagement among employees employed by audit firms operating in the South African FSI that were not included in this study. To circumvent the sixth limitation of this study, future endeavours could include alternative latent variables. For example, while this study showed that employees employed by audit firms operating in the South African FSI who have proactive personalities are more likely to engage in job-crafting behaviours, future research endeavours could investigate which other personality traits correlate with job crafting.

The fact that the majority of emphasis fell on the individual-level consequences of job crafting represents the seventh limitation of this study. Teamwork and interdependence are synonymous with modern organisations, as employees have to rely on their colleagues. Audit firms operating in the South African FSI are no different. For this reason, employees need to be cognisant of the impact their job-crafting behaviours has on colleagues. Consequently, future research should consider investigating the group-level consequences of job-crafting behaviours. Furthermore, the current study did not investigate mediating and moderating relationships within the proposed structural model. Future researchers are advised to consider studying indirect relationships in the existing model.

Lastly, this study did not include financial performance metrics to bolster the validity of the proposed model and to address ambivalence regarding the importance of employee retention and employee engagement. Due to the competitiveness associated with modern organisations, future researchers are advised to consider integrating this issue into their research endeavours.

#### **5.4. SUMMARY**

By exploring the factors that give rise to turnover intention and employee engagement among employees employed in audit firms operating in the South African FSI, this study made a

positive contribution to the theoretical framework of turnover intention and employee engagement. The reported research findings illustrate the impact of job crafting, proactive personality and meaningful work on the increasingly worrying trend of turnover and employee disengagement. This will provide South African industrial psychologists with much needed insight into the effective management of the problem presented here. With reference to the highlighted managerial implications and recommended practical interventions, industrial psychologists can ensure that valuable employees are retained and a sense of engagement is cultivated among employees.



## REFERENCE LIST

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
- Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior. *Journal of Applied Social Psychology*, 32(4), 665-683.
- Akkermans, J., Schaufeli, W. B., Brenninkmeijer, V., & Blonk, R. W. B. (2013). The role of career competencies in the Job Demands-Resources model. *Journal of Vocational Behavior*, 83(3), 356-366.
- Aktouf, O. (1992). Management and theories of organizations in the 1990s: Toward a critical radical humanism?. *Academy of Management Review*, 17(3), 407-431.
- Alarcon, G. M., & Edwards, J. M. (2011). The relationship of engagement, job satisfaction and turnover intentions. *Stress & Health: Journal of the International Society for the Investigation of Stress*, 27(3), 294-298.
- Alderfer, C. P. (1972). *Existence, relatedness and growth*. New York: Free Press.
- Allen, D. G., Shore, L. M., & Griffeth, R. W. (2003). The role of perceived organizational support and supportive human resource practices in the turnover process. *Journal of Management*, 29(1), 99-118.
- Allen, D. G., Weeks, K. P., & Moffitt, K. R. (2005). Turnover intentions and voluntary turnover: The moderating roles of self-monitoring, locus of control, proactive personality, and risk aversion. *Journal of Applied Psychology*, 90(2), 980-990.
- Amabile, T. M., Hill, K. G., Hennessey, B. A., & Tighe, E. M. (1994). The Work Preference Inventory: Assessing intrinsic and extrinsic motivational orientations. *Journal of Personality and Social Psychology*, 66(5), 950-967.
- Anastasi, A., & Urbina, A. (1997). *Psychological testing*. Upper Saddle River, New Jersey: Prentice-Hall.
- Andrews, F. M., & Farris, G. F. (1972). Time pressure and performance of scientists and engineers: A five-year panel study. *Organizational Behavior and Human Performance*, 8(2), 185-200.
- Ashforth, B. E., & Kreiner, G. E. (1999). "How can you do it?": Dirty work and the challenge of constructing a positive identity. *Academy of Management Review*, 24(3), 413-434.

- Ayers, D. F., Miller-Dyce, C., & Carlone, D. (2008). Security, dignity, caring relationships, and meaningful work. *Community College Review*, 35(4), 257–276.
- Babbie, E., & Mouton, J. (2006). *The practice of social research*. Cape Town: Oxford University Press Southern Africa.
- Bakker, A. B. (2011). An evidence-based model of work engagement. *Current Directions in Psychological Science*, 20(4), 265–269.
- Bakker, A. B., & Demerouti, E. (2006). Towards a model of work engagement. *Career Development International*, 13(3), 209–223.
- Bakker, A. B., & Demerouti, E. (2007). The Job Demands-Resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309–328.
- Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *Career Development International*, 13(3), 209–223.
- Bakker, A. B., & Demerouti, E. (2013). Job Demands–Resources theory. In A. P. Chen & C. Cooper (Eds.), *Wellbeing: A complete reference guide* (pp. 1–39). Chichester: Wiley-Blackwell.
- Bakker, A. B., Demerouti, E., De Boer, E., & Schaufeli, W. B. (2003). Job demands and job resources as predictors of absence duration and frequency. *Journal of Vocational Behavior*, 62(2), 341–356.
- Bakker, A. B., Demerouti, E., & Euwema, M. C. (2005). Job resources buffer the impact of job demands on burnout. *Journal of Occupational Health Psychology*, 10(2), 170–180.
- Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2003). The socially induced burnout model. *Advances in Psychology Research*, 25(1), 13–30.
- Bakker, A. B., Demerouti, E., Taris, T. W., Schaufeli, W. B., & Schreurs, P. J. (2003). A multigroup analysis of the Job Demands-Resources model in four home care organizations. *International Journal of Stress Management*, 10(1), 16–38.
- Bakker, A. B., Demerouti, E., & Verbeke, W. (2004). Using the Job Demands-Resources model to predict burnout and performance. *Human Resource Management*, 43(1), 83–104.

- Bakker, A. B., Hakanen, J. J., Demerouti, E., & Xanthopoulou, D. (2007). Job resources boost work engagement, particularly when job demands are high. *Journal of Educational Psychology*, 99(2), 274-284.
- Bakker, A. B., & Schaufeli, W. B. (2008). Positive organizational behavior: Engaged employees in flourishing organizations. *Journal of Organizational Behavior*, 29(2), 147-154.
- Bakker, A. B., Tims, M., & Derks, D. (2012). Proactive personality and job performance: The role of job crafting and work engagement. *Human Relations*, 65(10), 1359–1378.
- Bakker, A. B., Van Emmerik, H., & Euwema, M. C. (2006). Crossover of burnout and engagement in work teams. *Work and Occupations*, 33(4), 464-489.
- Bakker, A. B., Van Emmerik, H., & Van Riet, P. (2008). How job demands, resources, and burnout predict objective performance: A constructive replication. *Anxiety, Stress, & Coping*, 21(3), 309-324.
- Balducci, C., Fraccaroli, F., & Schaufeli, W. B. (2011). Workplace bullying and its relation with work characteristics, personality, and post-traumatic stress symptoms: An integrated model. *Anxiety, Stress & Coping*, 24(5), 499–513.
- Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37(2), 122-147.
- Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs: Prentice Hall.
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Barrick, M. R., Mount, M. K., & Li, N. (2013). The theory of purposeful work behavior: The role of personality, higher-order goals and job characteristics. *Academy of Management Review*, 38(1), 132–153.
- Bateman, T.S., & Crant, J.M. (1993). The proactive component of organisational behaviour: A measure and correlates. *Journal of Organizational Behavior*, 14(1), 103-118.
- Baumeister, R. F. (1991). *Meanings of life*. New York: Guilford Press.
- Baumeister, R.F. & Vohs, K.D. (2002). The pursuit of meaningfulness in life. In C.R. Snyder & S.J. Lopez (Eds.), *Handbook of Positive Psychology* (pp. 608-618). New York: Oxford University Press.

- Beam, J. (2009, November 12). *What is employee turnover?*. Retrieved May 13, 2012, from WiseGEEK: <http://www.wisegeek.com/what-is-employee-turnover.htm>
- Beecroft, P., Dorey, F., & Wenten, M. (2008). Turnover intention in new graduate nurses: A multivariate analysis. *Journal of Advanced Nursing*, 62(1), 41–52.
- Behson, S. J., Eddy, E. R., & Lorenzet, S. J. (2000). The importance of the critical psychological states in the job characteristics model: A meta-analytic and structural equations modeling examination. *Current research in Social Psychology*, 5(12), 170-189.
- Berg, J. M., & Dutton, J. E. (2008). *Crafting a fulfilling job: Bringing passion into work*. Retrieved April, 18, 2013, from <http://justinmberg.com/publications.html>
- Berg, J. M., Dutton, J. E., & Wrzesniewski, A. (2007). What is job crafting and why does it matter?. *Regents of the University of Michigan*, 1–8.
- Bindl, U., & Parker S.K. (2011) Feeling good and performing well? Psychological engagement and positive behaviors at work. In S. Albrecht (Eds.), *Handbook of employee engagement: Perspectives, issues, research and practice* (pp. 385-398). Cheltenham: Edward Elgar.
- Bluedorn, A.C. (1982). A unified model of turnover from organizations. *Human Relations*, 35(2), 135-153.
- Boe, T.A. (2002). *Gaining and/or maintaining employee trust within service organizations*. Unpublished master's thesis. Wisconsin: University of Wisconsin-Stout.
- Bohlander, G. & Snell, S. (2009). *Managing human resources* (15<sup>th</sup> Ed.). Ohio: Thomson South Western.
- Bouckennooghe, D., Raja, U., & Butt, A. N. (2013). Combined effects of positive and negative affectivity and job satisfaction on job performance and turnover intentions. *The Journal of Psychology*, 147(2), 105–123.
- Bowen, P., Cattell, K., Distiller, G., & Edwards, P. J. (2008). Job satisfaction of South African quantity surveyors: An empirical study. *Construction, Management & Economics*, 26(7), 765-780.
- Bowers, K. S. (1973). Situationism in psychology: An analysis and critique. *Psychological Bulletin*, 80(5), 307–336.

- Bowie, N. E. (1998). A Kantian theory of meaningful work. *Journal of Business Ethics*, 17(9-10), 1083–1092.
- Brauchli, R., Schaufeli, W. B., Jenny, G. J., Füllemann, D., & Bauer, G. F. (2013). Disentangling stability and change in job resources, job demands, and employee well-being: A three-wave study on the Job-Demands Resources model. *Journal of Vocational Behavior* 83(2), 117-129.
- Bremner, N., & Carrière, J. (2011). *The effects of skill variety, task significance, task identity and autonomy on occupational burnout in a hospital setting and the mediating effects of work meaningfulness*. Working paper (WP.11.02), Telfer School of Management. Ottawa: University of Ottawa
- Brief, A. P., & Nord, W. R. (1990). Work and non-work connections. In A. P. Brief & W. R. Nord (Eds.), *Meanings of occupational work: A collection of essays* (pp. 171–199). Lexington, Massachusetts: Lexington Books.
- Brough, P., Timms, C., Siu, O. L., Kalliath, T., O'Driscoll, M., Sit, C., & Lu, C. Q. (2013). Validation of the Job Demands-Resources model in cross-national samples: Cross-sectional and longitudinal predictions of psychological strain and work engagement. *Human Relations*, 66(10), 1311–1335.
- Bryman, A., & Bell, E. (2003). *Business research methods*. New York: Oxford University Press.
- Burger, R. (2011). *Modification, elaboration and empirical evaluation of the De Goede learning potential structural model*. Unpublished master's thesis. Stellenbosch: Stellenbosch University.
- Campbell, D. J. (2000). The proactive employee: Managing workplace initiative. *Academy of Management Executive*, 14(3), 52-66.
- Carsten, J. M., & Spector, P. E. (1987). Unemployment, job satisfaction, and employee turnover: A meta-analytic test of the Muchinsky model. *Journal of Applied Psychology*, 72(3), 374-381.
- Cartwright, S., & Holmes, N. (2006). The meaning of work: The challenge of regarding employee engagement and reducing cynicism. *Human Resource Management Review*, 16(2), 199–208.

- Cavanaugh, M. A., Boswell, W. R., Roehling, M. V., & Boudreau, J. W. (2000). An empirical examination of self-reported work stress among US managers. *Journal of Applied Psychology*, 85(1), 65-74.
- Chalofsky, N. (2003). An emerging construct for meaningful work. *Human Resource Development International*, 6(1), 69–83.
- Chalofsky, N. (2010). *Meaningful workplaces: Reframing where and how we work*. San Francisco: Jossey-Bass Publishers.
- Chalofsky, N., & Krishna, V. (2009). Meaningfulness, commitment and engagement: The intersection of a deeper level of intrinsic motivation. *Advances in Developing Human Resources*, 11(2), 189–203.
- Campion, M. A., & McClelland, C. L. (1993). Follow-up and extension of the interdisciplinary costs and benefits of enlarged jobs. *Journal of Applied Psychology*, 78(3), 339-351.
- Chang, W. J. A., Wang, Y. S., & Huang, T. C. (2013). Work design-related antecedents of turnover intention: A multilevel approach. *Human Resource Management*, 52(1), 1–26.
- Chen, G. A. (2007). *The meaning of meaningful work: Subject-object meaningfulness in knowledge work*. Unpublished honours thesis. Michigan: University of Michigan.
- Chiu, R. K., & Francesco, A. M. (2003). Dispositional traits and turnover intention: Examining the mediating role of job satisfaction and affective commitment. *International Journal of Manpower*, 24(3), 284-298.
- Cho, Y. J., & Lewis, G. B. (2012). Turnover intention and turnover behavior: Implications for retaining federal employees. *Review of Public Personnel Administration*, 32(1), 4–23.
- Christian, J. S., & Ellis, A. P. (2013). The crucial role of turnover intentions in transforming moral disengagement into deviant behavior at work. *Journal of Business Ethics*, 112(1), 1-16.
- Chu, C.W.L., & Mondejar, R. (2011). *Enhancing individual's work outcomes*. Paper presented at the Annual Meeting of the Academy of Management in San Antonio, Texas.

- Chughtai, A. A., & Buckley, F. (2008). Work engagement and its relationship with state and trait trust: A conceptual analysis. *Journal of Behavioral and Applied Management*, 10(1), 47–71.
- Cicero, L., & Pierro, A. (2007). Charismatic leadership and organizational outcomes: The mediating role of employees' work-group identification. *International Journal of Psychology*, 42(5), 297–306.
- Claes, R., Beheydt, C., & Lemmens, B. (2005). Unidimensionality of abbreviated proactive personality scales across cultures. *Applied Psychology: An International Review*, 54(4), 476–489.
- Coetzee, M., & De Villiers, M. (2010). Sources of job stress, work engagement and career orientations of employees in a South African financial institution. *Southern African Business Review*, 14(1), 27–58.
- Colema, W. (1987). Stabilizing the workforce: A complete guide to controlling turnover. *Personnel Psychology*, 40(4), 877–879.
- Conger, J. A. (1994). *Spirit at work: Discovering the spirituality of leadership*. San Francisco: Jossey-Bass Publishers.
- Crant, J. M. (1995). The proactive personality scale and objective job performance among real estate agents. *Journal of Applied Psychology*, 80(4), 532–537.
- Crant, J. M. (1996). The proactive personality scale as a predictor of entrepreneurial intentions. *Journal of Small Business Management*, 34(3), 42–53.
- Crant, J. M. (2000). Proactive behavior in organizations. *Journal of Management*, 26(3), 435–462.
- Csikszentmihalyi, M. (1990). *Flow: The psychology of optimal experience*. New York: Harper and Row.
- Dalton, D. R., Daily, C. M., Johnson, J. L., & Ellstrand, A. E. (1999). Number of directors and financial performance: A meta-analysis. *Academy of Management Journal*, 42(6), 674–686.
- De Lange, A. H., De Witte, H., & Notelaers, G. (2008). Should I stay or should I go? Examining longitudinal relations among job resources and work engagement for stayers versus movers. *Work & Stress*, 22(3), 201–223.



- Deci, E. L., Connell, J. P., & Ryan, R. M. (1989). Self-determination in a work organization. *Journal of Applied Psychology*, 74(4), 580-590.
- Delery, J. E., & Shaw, J. D. (2001). The strategic management of people in work organizations: Review, synthesis, and extension. *Research in Personnel and Human Resources Management*, 20(1), 165-197.
- Deloitte. (2011). *Talent Edge 2020: Building the recovery together - What talent expects and how managers are responding*. Retrieved June 22, 2013, from [http://www.deloitte.com/assets/Dcom-UnitedStates/Local%20Assets/Documents/IMOs/Talent/us\\_talent\\_talentedge2020employee\\_042811.pdf](http://www.deloitte.com/assets/Dcom-UnitedStates/Local%20Assets/Documents/IMOs/Talent/us_talent_talentedge2020employee_042811.pdf)
- Deloitte. (2013). *Resetting horizons: Global human capital trends*. Quebec: Deloitte Development LLC.
- Demerouti, E., Bakker, A. B., Janssen, P. P. M., & Schaufeli, W. B. (2001). Burnout and engagement at work as a function of demands and control. *Scandinavian Journal of Work and Environment and Health*, 27(4), 279-286.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The Job Demands-Resources model of burnout. *Journal of Applied Psychology*, 86(3), 499-512.
- Demerouti, E., & Cropanzano, R. (2010). From thought to action: Employee work engagement and job performance. In A. B. Bakker & M. P. Leiter (Eds.), *Work engagement: A handbook of essential theory and research* (pp. 147-163). New York: Psychology Press.
- Diamantopoulos, A., & Siguaw, J. A. (2000). *Introducing LISREL*. London: SAGE Publications.
- Du Toit, M., & Du Toit, S. (2001). *Interactive LISREL: User's guide*. Lincolnwood: Scientific Software International.
- Engelbrecht, S. (2012). *Standard operating procedure*. Stellenbosch: Research Ethics Committee, Human Research (Humanities), Stellenbosch University.
- Fairlie, P. (2011). Meaningful work, employee engagement, and other key employee outcomes: Implications for human resource development. *Developing Human Resources*, 13(4), 508-525.



- Fay, D., & Frese, M. (2001). The concept of personal initiative: An overview of validity studies. *Human Performance*, 14(1), 97-124.
- Fay, D., & Sonnentag, S. (2000). *Stressors and personal initiative: A longitudinal study on organizational behaviour*. Manuscript submitted for publication.
- Firth, L., Mellor, D., Moore, K. A., & Loquet, C. (2004). How can managers reduce employee turnover intention?. *Journal of Managerial Psychology*, 19(2), 170–187.
- Flint, D., Haley, L. M., & McNally, J. J. (2013). Individual and organizational determinants of turnover intent. *Personnel Review*, 42(5), 552-572
- Fok, L. Y., Hartman, S. J., Patti, A. L., & Razek, J. R. (2000). Human factors affecting the acceptance of total quality management. *International Journal of Quality & Reliability Management*, 17(7), 714–729.
- Fox, A. (2012). Drive turnover down. *HR Magazine*, 57(7), 22-27.
- Frase, M.J. (2013). African countries achieve high levels of employee engagement. *Magazine of the World Federation of People Management Associations*, 23(2), 7–8.
- Frenkel, S.J., Korczynski, M., Shire, K.A., & Tam, A. (1999). *On the front line: Organization of work in the information economy*. Ithaca, New York.: Cornell University Press.
- Frese, M., & Fay, D. (2001). Personal initiative (PI): An active performance concept for work in the 21st century. In B.M. Staw & R.M. Sutton (Eds.), *Research in Organizational Behavior* (pp. 133-187). Amsterdam: Elsevier Science.
- Frese, M., Garst, H., & Fay, D. (2007). Making things happen: Reciprocal relationships between work characteristics and personal initiative in a four-wave longitudinal structural equation model. *Journal of Applied Psychology*, 92(4), 1084-1102.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56(3), 218-226.
- Fryer, D., & Payne, R. (1984). Proactive behaviour in unemployment: Findings and implications. *Leisure Studies*, 3(3), 273-295.
- Fuller, J. B., Marler, L. E., & Hester, K. (2006). Promoting felt responsibility for constructive change and proactive behavior: Exploring aspects of an elaborated model of work design. *Journal of Organizational Behavior*, 27(8), 1089-1120.

- Gallup (2013). *State of the American workplace: Employee engagement insights for U.S. business leaders*. Washington: Gallup Incorporated.
- Garfinkle, J. (2012). *Keep your employees happy*. Retrieved June 26, 2013, from <http://www.garfinkleexecutivecoaching.com/keepyouremployeeshappy/>
- Gbadamosi, G., Ndaba, J., & Oni, F. (2007). Predicting charlatan behaviour in a non-Western setting: lack of trust or absence of commitment?. *Journal of Management Development*, 26(8), 753-769.
- Gecas, V. (1991). The self-concept as a basis for a theory of motivation. In J. Howard & P. Callero (Eds.), *The self-society dynamic: Cognition, emotion, and action* (pp. 171-187). Cambridge: Cambridge University Press.
- Ghitulescu, B. (2006). *Job crafting and social embeddedness at work*. Unpublished doctoral dissertation. Pittsburgh: University of Pittsburgh.
- Gibson, J. L., Ivancevich, J. M., Donnely, J. H., & Konopaske, R. (2009). *Organizations: Behavior, structure, processes* (13<sup>th</sup> Ed.). New York: McGraw-Hill.
- Goel, A. K., Gupta, N., & Rastogi, R. (2013). Measuring the level of employee engagement: A study from Indian automobile sector. *Indian Culture and Business Management*, 6(1), 5-21.
- Goffman, E. (1974). *Frame analysis*. New York: Harper and Row.
- Goggin, M. (2000). I'm behind you! The manager as a coach. *Nursing Economics*, 18(3), 160-161.
- Goldberg, L. R. (1993). The structure of phenotypic personality traits. *American Psychologist*, 48(1), 26-34.
- Grant, A. M., & Ashford, S. J. (2008). The dynamics of proactivity at work. *Research in Organizational Behavior*, 28(1), 3-34.
- Grant, A. M., Fried, Y., Parker, S. K., & Frese, M. (2010). Putting job design in context: Introduction to the special issue. *Journal of Organizational Behavior*, 31(2-3), 145-157.
- Grant, A. M., Gino, F., & Hofmann, D. A. (2011). Reversing the extraverted leadership advantage: The role of employee proactivity. *Academy of Management Journal*, 54(3), 528-550.

- Grant, A. M., & Parker, S. K. (2009). 7 Redesigning work design theories: The rise of relational and proactive perspectives. *The Academy of Management Annals*, 3(1), 317-375.
- Griffeth, R. W., Hom, P. W., & Gaertner, S. (2000). A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests, and research implications for the next millennium. *Journal of Management*, 26(3), 463-488.
- Griffin, M. A., Neal, A., & Parker, S. K. (2007). A new model of work role performance: Positive behavior in uncertain and interdependent contexts. *Academy of Management Journal*, 50(2), 327-347.
- Gu, Q., Yu, M., & Guan, Y. (2013). *Linking personality traits and job satisfaction to creativity*. Paper presented at the International Conference on Advanced Computer Science and Electronics Information (ICACSEI 2013) in Beijing.
- Hackman, J. R., & Oldham, G. R. (1975). Development of the Job Diagnostic Survey. *Journal of Applied Psychology*, 60(2), 159-170.
- Hackman, J. R., & Oldham, G. R. (1980). *Work Redesign*. Reading: Addison-Wesley.
- Hackman, J. R., & Oldham, G. R. (1988). Motivation through the design of work: Test of a theory. *Personality and Individual Differences*, 9(3), 589-596.
- Hakanen, J. J., Bakker, A. B., & Demerouti, E. (2005). How dentists cope with their job demands and stay engaged: The moderating role of job resources. *European Journal of Oral Sciences*, 113(6), 479-487.
- Hakanen, J. J., Bakker, A. B., & Schaufeli, W. B. (2006). Burnout and work engagement among teachers. *Journal of School Psychology*, 43(6), 495-513.
- Hakanen, J. J., Perhoniemi, R., & Bakker, A. B. (2013). Crossover of exhaustion between dentists and dental nurses. *Stress and Health*, 29(3), 1-12.
- Hakanen, J. J., Perhoniemi, R., & Toppinen-Tanner, S. (2008). Positive gain spirals at work: From job resources to work engagement, personal initiative and work-unit innovativeness. *Journal of Vocational Behavior*, 73(1), 78-91.
- Hakanen, J. J., Schaufeli, W. B., & Ahola, K. (2008). The Job Demands-Resources model: A three-year cross-lagged study of burnout, depression, commitment, and work engagement. *Work & Stress*, 22(3), 224-241.

- Halbesleben, J. R. B. (2010). A meta-analysis of work engagement: Relationships with burnout, demands, resources, and consequences. In A. B. Bakker & M. P. Leiter (Eds.), *Work engagement: A handbook of essential theory and research* (pp. 102–117). New York: Psychology Press.
- Halbesleben, J. R. B., & Wheeler, A. R. (2008). The relative roles of engagement and embeddedness in predicting job performance and intention to leave. *Work & Stress: An International Journal of Work, Health & Organizations*, 22(3), 242–256.
- Hall, J. R. (2000). Tools for improving productivity. *Air Conditioning Heating & Refrigeration News*, 210(11), 22.
- Hanisch, K. A., & Hulin, C. L. (1990). Job attitudes and organizational withdrawal: An examination of retirement and other voluntary withdrawal behaviors. *Journal of Vocational Behavior*, 37(1), 60-78.
- Harackiewicz, J. M., Manderlink, G., & Sansone, C. (1984). Rewarding pinball wizardry - Effects of evaluation and cue value on intrinsic interest. *Journal of Personality and Social Psychology*, 47(2), 287-300.
- Harnois, G., & Gabriel, P. (2000). *Mental health and work: Impact, issues and good practices*. Geneva: World Health Organization.
- Harrison, M. M. (2008). *Finding meaning in the everyday: An in-depth investigation of meaningful work experiences*. Unpublished doctoral dissertation. Pennsylvania: Pennsylvania State University.
- Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement and business outcomes: A meta-analysis. *Journal of Applied Psychology*, 87(2), 268–279.
- Hasan, H. (2004). Meaning of work among a sample of Kuwaiti workers. *Psychological Reports*, 94(1), 195–207.
- Hass, S. C. (2007). Economic trends and investment planning work: The key to wealth, health and happiness. *Journal of Financial Service Professionals*, 61(1), 19–21.
- Haughey, J. C. (1989). *Converting 9 to 5*. New York: Crossroad Publishing.

- Hayne, A. N., Gerhardt, C., & Davis, J. (2009). Filipino nurses in the United States recruitment, retention, occupational stress, and job satisfaction. *Journal of Transcultural Nursing*, 20(3), 313-322.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44(3), 513-524.
- Hobfoll, S. E., Johnson, R. J., Ennis, N., & Jackson, A. P. (2003). Resource loss, resource gain, and emotional outcomes among inner city women. *Journal of Personality and Social Psychology*, 84(3), 632-643.
- Holbeche, L., & Springett, N. (2004). In search of meaning in the workplace. Horsham: Roffey Park Institute.
- Holtom, B. C., Mitchell, T. R., Lee, T. W., & Eberly, M. B. (2008). 5 Turnover and retention research: A glance at the past, a closer review of the present, and a venture into the future. *The Academy of Management Annals*, 2(1), 231-274.
- Hom, P. W., Caranikas-Walker, F., Prussia, G. E., & Griffeth, R. W. (1992). A meta-analytical structural equations analysis of a model of employee turnover. *Journal of Applied Psychology*, 77(6), 890-909.
- Hooper, D., Coughlan, J., & Mullen, M. R. (2008). Structural equation modeling: Guidelines for determining model fit. *Electronic Journal of Business Research Methods*, 6(1), 53-60.
- Hu, Q., Schaufeli, W. B., & Taris, T. W. (2013). Does equity mediate the effects of job demands and job resources on work outcomes? An extension of the Job Demands-Resources model. *Career Development International*, 18(4), 357-376.
- Hulin, C. L., Roznowski, M., & Hachiya, D. (1985). Alternative opportunities and withdrawal decisions: Empirical and theoretical discrepancies and an integration. *Psychological Bulletin*, 97(2), 233-250.
- Humphrey, S. E., Nahrgang, J. D., & Morgeson, F. P. (2007). Integrating motivational, social, and contextual job design features: A meta-analytic summary and theoretical extension of the job design literature. *Journal of Applied Psychology*, 92(5), 1332-1356.

- Hussey, D. M., & Eagan, P. D. (2007). Using structural equation modeling to test environmental performance in small and medium-sized manufacturers: Can SEM help SMEs?. *Journal of Cleaner Production*, 15(4), 303-312.
- Ilgén, D. R., & Hollenbeck, J. R. (1991). The structure of work: Job design and roles. In M. D. Dunnette & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (Vol. 2, 2<sup>nd</sup> Ed., pp. 165-207). Palo Alto: Consulting Psychologists Press.
- Jackson, L., & Rothmann, S. (2006). Occupational stress, organisational commitment, and ill-health of educators in the North West Province. *South African Journal of Education*, 26(1), 75-95.
- Jackson, S. E., Turner, J. A., & Brief, A. P. (1987). Correlates of burnout among public service lawyers. *Journal of Organizational Behavior*, 8(4), 339-349.
- Jacobs, E.J. (2005). *The development of a predictive model of turnover intentions of professional nurses*. Unpublished doctoral dissertation. Johannesburg: University of Johannesburg.
- Janse van Rensburg, C. (2010). *Engagement in call centres: Exploring eliciting factors*. Unpublished master's thesis. Stellenbosch: Stellenbosch University.
- Jansen van Rensburg, C. (2011). *The development of an experimental conscientiousness measurement instrument within the SAPI project*. Unpublished master's thesis. Stellenbosch: Stellenbosch University.
- Janssen, O. (2001). Fairness perceptions as a moderator in the curvilinear relationships between job demands, and job performance and job satisfaction. *Academy of Management Journal*, 44(5), 1039–1050.
- Janssens, W., Sefoko, N., Van Rooyen, J., & Bostyn, F. (2006). Measuring perceived black economic empowerment in the South African wine industry. *Agrekon*, 45(4), 381-405.
- Jeswani, S., & Dave, S. (2012). Impact of individual personality on turnover intention: A study on faculty members. *Management and Labor Studies*, 37(3), 253–265.
- Jöreskog, K., & Sörbom, D. (1993). *LISREL 8: Structural equation modeling with the SIMPLIS command language*. Chicago, Illinois: Scientific Software International Incorporated.

- Jöreskog, K., & Sörbom, D. (1996). *LISREL 8: User's reference guide*. Chicago, Illinois: Scientific Software International Incorporated.
- Judge, T. A., Locke, E. A., & Durham, C. C. (1997). The dispositional causes of job satisfaction: A core evaluations approach. *Research in Organizational Behavior*, 19(1), 151–188.
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692-724.
- Kalliath, T. J., & Beck, A. (2001). Is the path to burnout and turnover paved by a lack of supervisory support? A structural equations test. *New Zealand Journal of Psychology*, 30(2), 72-78.
- Kelloway, E. K. (1998). *Using LISREL for structural equation modeling: A researcher's guide*. Thousand Oaks, California: SAGE Publications.
- Keltner, D., Gruenfeld, D. H., & Anderson, C. (2003). Power, approach, and inhibition. *Psychological Review*, 110(2), 265-284.
- Kerlinger, F. N. (1973) *Foundations of behavioral research* (2<sup>nd</sup> Ed.). New York: Holt, Rinehart & Winston.
- Kerlinger, F. N., & Lee, H. B. (2000). *Foundations of behavioral research* (4<sup>th</sup> Ed.). Fort Worth: Harcourt.
- Ketchum, L. D., & Trist, E. (1992). *All teams are not created equal: How employee empowerment really works*. Newbury Park: Sage Publications.
- Kiggundu, M. N. (1983). Task interdependence and job design: Test of a theory. *Organizational Behavior and Human Performance*, 31(2), 145-172.
- Klinger, E. (1977). *Meaning and void*. Minneapolis: University of Minnesota Press.
- Kock, R. (2010). *Improving employee engagement levels to weather the economic storm*. Retrieved May 21, 2013, from <http://www.humanresourcesiq.com/talent-management/articles/improving-employee-engagement-levels-to-weather-th/>
- Kolakowski, M. (2013). *The financial services industry*. Retrieved July 9, 2013, from [http://financecareers.about.com/od/financialservicesindustry/The\\_Financial\\_Services\\_Industry.htm](http://financecareers.about.com/od/financialservicesindustry/The_Financial_Services_Industry.htm)



- Korunka, C., Kubicek, B., Schaufeli, W. B., & Hoonakker, P. (2009). Work engagement and burnout: Testing the robustness of the Job Demands-Resources model. *The Journal of Positive Psychology*, 4(3), 243-255.
- Kosciulek, J. F., & Wheaton, J. E. (2003). Rehabilitation counseling with individuals with disabilities: An empowerment framework. *Rehabilitation Education*, 17(4), 207-214.
- Koyuncu, M., Burke, R. J., & Fiksenbaum, L. (2006). Work engagement among women managers and professionals in a Turkish bank: Potential antecedents and consequences. *Equal Opportunities International*, 25(4), 299-310.
- Kulik, C. T., Oldham, G. R., & Hackman, J. R. (1987). Work design as an approach to person-environment fit. *Journal of Vocational Behavior*, 31(3), 278-296.
- Kuo, H. T., Lin, K. C., & Li, I. (2013). The mediating effects of job satisfaction on turnover intention for long-term care nurses in Taiwan. *Journal of Nursing Management*, 21(2), 1-9.
- Laurent, S. (2003). The dynamic duo: Motivation & recognition. *Intercom*, 50(3), 22-24.
- Le Cornu, A. (2009). Meaning, internalisation, and externalisation: Toward a fuller understanding of the process of reflection and its role in the construction of the self. *Adult Education Quarterly* 59(4), 279-297.
- Lee, D. (2008). *Want more motivated employees? Think autonomy*. Retrieved August 6, 2013, from [http://www.humannatureatwork.com/articles/management\\_development/Autonomy.htm](http://www.humannatureatwork.com/articles/management_development/Autonomy.htm)
- Lee, F., & Tiedens, L. Z. (2001). Is it lonely at the top?: The independence and interdependence of power holders. *Research in Organizational Behavior*, 23(1), 43-91.
- Lehong, G., & Hongguang, D. (2012). Research on turnover intention and countermeasure of key employees in Xuzhou coal mining group. *Research Journal of Applied Sciences, Engineering and Technology*, 4(21), 4438-4442.
- Lepak, D. P., & Snell, S. A. (2002). Examining the human resource architecture: The relationships among human capital, employment, and human resource configurations. *Journal of Management*, 28(4), 517-543.



- LePine, J. A., Podsakoff, N. P., & LePine, M. A. (2005). A meta-analytic test of the challenge stressor–hindrance stressor framework: An explanation for inconsistent relationships among stressors and performance. *Academy of Management Journal*, 48(5), 764-775.
- Lepper, M. R., & Greene, D. (1975). Turning play into work: Effects of adult surveillance and extrinsic rewards on children's intrinsic motivation. *Journal of Personality and Social Psychology*, 31(3), 479-486.
- Lewig, K. A., Xanthopoulou, D., Bakker, A. B., Dollard, M. F., & Metzger, J. C. (2007). Burnout and connectedness among Australian volunteers: A test of the Job Demands–Resources model. *Journal of Vocational Behavior*, 71(3), 429-445.
- Linley, P. A., Harrington, S., & Garcea, N. (2010). *Oxford handbook of positive psychology and work*. New York: Oxford University Press.
- Lips-Wiersma, M., & Morris, L. (2009). Discriminating between ‘meaningful work’ and the ‘management of meaning’. *Journal of Business Ethics*, 88(3), 491-511.
- Lips-Wiersma, M., & Wright, S. (2012). Measuring the meaning of meaningful work: Development and validation of the Comprehensive Meaningful Work Scale (CMWS). *Group & Organization Management*, 37(5), 655–685.
- Llorens, S., Bakker, A. B., Schaufeli, W., & Salanova, M. (2006). Testing the robustness of the Job Demands-Resources model. *International Journal of Stress Management*, 13(3), 378-391.
- Llorens, S., Schaufeli, W., Bakker, A., & Salanova, M. (2007). Does a positive gain spiral of resources, efficacy beliefs and engagement exist?. *Computers in Human Behavior*, 23(1), 825-841.
- Lunenburg, F. C. (2011). Motivating by enriching jobs to make them more interesting and challenging. *International Journal of Business Management, and Administration*, 15(1), 1-11.
- Lupfer, E. (2011). *A social workplace starts with culture and engagement*. Retrieved February 26, 2013, from <http://socialmediatoday.com/elizabeth-lupfer/387478/you-asked-i-answered-social-workplace-starts-culture-and-engagement>
- Lyons, P. (2008). The crafting of jobs and individual differences. *Journal of Business Psychology*, 23(1-2), 25–36.

- MacCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological methods*, 1(2), 130-149.
- Malhotra, N.K. (2004) *Marketing research: An applied orientation* (4<sup>th</sup> Ed.). New Jersey: Pearson Education Incorporated.
- Martela, F. (2010, August). *Meaningful work: An integrative model based on the human need for meaningfulness*. Paper presented at the Academy of Management Annual Meeting in Montréal, Quebec.
- Martin, A., & Roodt, G. (2008). Perceptions of organizational commitment, job satisfaction and turnover intentions in a post-merger South African tertiary institution. *SA Journal of Industrial Psychology*, 34(1), 23–31.
- Maslach, C., Jackson, S. E., & Leiter, M. P. (1996). *Maslach Burnout Inventory manual* (3<sup>rd</sup> Ed.). Palo Alto: Consulting Psychologists Press.
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52(1), 397–422.
- Massimini, F., & Carli, M. (1988). The systematic assessment of flow in daily life. In M. Csikszentmihalyi & I. S. Csikszentmihalyi (Eds.), *Optimal experience: Psychological studies of flow in consciousness* (pp. 266-287). New York: Cambridge University Press.
- May, D. R. (2003). *Fostering the human spirit at work: Toward an understanding of the influences on employees' experienced meaningfulness at work*. Unpublished manuscript.
- May, R. D., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of human spirit at work. *Journal of Occupational Psychology*, 77(1), 11–37.
- MBendi Information Services. (2013). *Financial services in South Africa: Overview*. Retrieved September 23, 2013, from <http://www.mbendi.com/indy/fsrv/af/sa/p0005.htm>
- McGregor, I., & Little, B. R. (1998). Personal projects, happiness, and meaning: on doing well and being yourself. *Journal of Personality and Social Psychology*, 74(2), 494-512.

- Menguc, B., Auh, S., Fisher, M., & Haddad, A. (2012). To be engaged or not to be engaged: The antecedents and consequences of service employee engagement. *Journal of Business Research*, 66(11), 2163–2170.
- Meyer, J., & Allen, N. (1997). *Commitment in the workplace*. Thousand Oaks: SAGE Publications.
- Michaelson, C. (2010a). The importance of meaningful work. *MIT Sloan Management Review*, 51(2), 12–13.
- Michaelson, C. (2010b). *What is meaningful work?*. Retrieved February 20, 2013, from <http://blogs.stthomas.edu/opusmagnum/2012/05/17/what-is-meaningful-work-5-questions-with-prof-michaelson/>
- Miller, J., Cabrita, J., & Vargas, O. (2011). *Social dialogue and working conditions*. European Foundation for the Improvement of Living and Working Conditions in Dublin.
- Milliken, F. J., Morrison, E. W., & Hewlin, P. F. (2003). An exploratory study of employee silence: Issues that employees don't communicate upward and why. *Journal of Management Studies*, 40(6), 1453-1476.
- Mitchell, T. R., Holtom, B. C., Lee, T. W., Sablinsky, C. J., & Erez, M. (2001). Why people stay: Using job embeddedness to predict voluntary turnover. *Academy of Management Journal*, 44(6), 1102-1121.
- Mobley, W.H., Horner, S.O. & Hollingsworth, A.T. (1978). An evaluation of precursors of hospital employee turnover. *Journal of Applied Psychology*, 63(4), 408–414.
- Modern Survey. (2010). *Employee engagement in the U.S. financial services industry: A study by Modern Survey*. Retrieved April 18, 2013, from <http://www.modernsurvey.com/news/employee-engagement-in-the-us-financial-services-industry-a-study-by-modern-survey>
- Molden, D. C., & Dweck, C. S. (2006). Finding "meaning" in psychology: a lay theories approach to self-regulation, social perception, and social development. *American Psychologist*, 61(3), 192-203.
- Moore, J. (2000). One road to turnover: An examination of work exhaustion in technology professionals. *MIS Quarterly*, 24(1), 141–168.

- Morgeson, F. P., & Humphrey, S. E. (2006). The Job Design Questionnaire (WDQ): Developing and validating a comprehensive measure for assessing job design and the nature of work. *Journal of Applied Psychology, 91*(6), 1321–1339.
- Moriarty, J. (2009). Rawls, self-respect, and the opportunity for meaningful work. *Social Theory & Practice, 35*(3), 441–459.
- Morin, E.M. (2008). *The meaning of work, mental health and organizational commitment*. Report R-585. Montréal, Quebec: IRSST.
- Morin, E.M., & Gagné, C. (2009). *Making work meaningful: Promoting psychological well-being*. Report R-644. Montréal, Quebec: IRSST.
- Morris, M. G., & Venkatesh, V. (2010). Job characteristics and satisfaction and job satisfaction: Understanding the role of enterprise resource planning system implementation. *MIS Quarterly, 34*(1), 143–161.
- Mossholder, K. W., Settoon, R. P., & Henagan, S. C. (2005). A relational perspective on turnover: Examining structural, attitudinal, and behavioral predictors. *Academy of Management Journal, 48*(4), 607-618.
- Mount, M. K., & Barrick, M. R. (1998). Five reasons why the “Big Five” article has been frequently cited. *Personnel Psychology, 51*(4), 849-857.
- Mujtaba, B. G., & Shuaib, S. (2010). An equitable total rewards approach to pay for performance management. *Journal of Management Policy and Practice, 11*(4), 111–121.
- Murphy, S. (2013). *The value of meaningful work*. Retrieved October 10, 2013, from <http://switchandshift.com/the-value-of-meaningful-work>
- Neimeyer, R. A. (2000). Searching for the meaning of meaning: Grief therapy and the process of reconstruction. *Death Studies, 24*(6), 541-558.
- Nielsen, K., Randall, R., Yarker, J., & Brenner, S. O. (2008). The effects of transformational leadership on followers’ perceived work characteristics and psychological well-being: A longitudinal study. *Work & Stress, 22*(1), 16-32.
- Noefer, K., Stegmaier, R., Molter, B., & Sonntag, K. (2009). A great many things to do and not a minute to spare: Can feedback from supervisors moderate the relationship

between skill variety, time pressure and employees' innovative behavior?. *Creativity Research Journal*, 21(4), 384–393.

Nunnally, J. C. (1978). *Psychometric Theory*. New York: McGraw-Hill.

O\*NET (2011). *Summary report for: 13-2011.02 – Auditors*. Retrieved April 10, 2013, from <http://www.onetonline.org/link/summary/13-2011.02>

Oien, L. (2012). Are people engaged?. *Leadership Excellence*, 29(1), 18.

Olivier, A. L., & Rothmann, S. (2007). Antecedents of work engagement in a multinational oil company. *SA Journal of Industrial Psychology*, 33(3), 49-56.

Panatik, S. A. B. (2012). Impact of job design on employee psychological strain among Malaysian technical workers. *Procedia - Social and Behavioral Sciences*, 40(1), 404–409.

Parent-Thirion, A., Fernández Macías, E., Hurley, J., & Vermeulen, G. (2006). *Fourth European Working Conditions Survey*. Luxembourg: European Foundation for the Improvement of Living and Working Conditions, European Union.

Park, C. L., & Folkman, S. (1997). Meaning in the context of stress and coping. *Review of General Psychology*, 1(2), 115 –144.

Parker, S. K. (1998). Enhancing role breadth self-efficacy: The roles of job enrichment and other organizational interventions. *Journal of Applied Psychology*, 83(6), 835-852.

Parker, S. K. (1999). *The proactive workforce: A model of the antecedents and outcomes of proactive and integrative job behaviours*. Unpublished working paper.

Parker, S. K. (2000). From passive to proactive motivation: The importance of flexible role orientations and role breadth self-efficacy. *Applied Psychology: An International Review*, 49(3), 447-469.

Parker, S. K., (2003). Longitudinal effects of lean production on employee outcomes and the mediating role of work characteristics. *Journal of Applied Psychology*, 88(4), 620-634.

Parker, S. K., & Collins, C. G. (2010). Taking stock: Integrating and differentiating multiple proactive behaviors. *Journal of Management*, 36(3), 633-662.

Parker, S. K., & Griffin, M. A. (2011). Understanding active psychological states: Embedding engagement in a wider nomological net and closer attention to

- performance. *European Journal of Work and Organizational Psychology*, 20(1), 60-67.
- Parker, S. K., Wall, T. D., & Cordery, J. L. (2001). Future work design research and practice: Towards an elaborated model of work design. *Journal of Occupational and Organizational Psychology*, 74(4), 413-440.
- Parker, S. K., Wall, T. D., & Jackson, P. R. (1997). "That's not my job": Developing flexible employee work orientations. *Academy of Management Journal*, 40(4), 899-929.
- Parker, S. K., Williams, H., & Turner, N. (2006). Modeling the antecedents of proactive behavior at work. *Journal of Applied Psychology*, 91(3), 636-652.
- Parker, S. K., & Wu, C. (in press). Leading for proactivity: How leaders cultivate staff who make things happen. In D. Day (Eds.), *Oxford Handbook of Leadership and Organizations* (pp. 83-96). Oxford: Oxford University Press.
- PeopleMetrics (2011). *Employee engagement trends report*. Philadelphia: PeopleMetrics Incorporated.
- Perez, M. (2008). *Turnover intent*. Unpublished diploma thesis. Zürich: University of Zürich.
- Peterson, U., Demerouti, E., Bergström, G., Åsberg, M., & Nygren, A. (2008). Work characteristics and sickness absence in burnout and nonburnout groups: A study of Swedish health care workers. *International Journal of Stress Management*, 15(2), 153-172.
- Petrou, P., Demerouti, E., Peeters, M. C., Schaufeli, W. B., & Hetland, J. (2012). Crafting a job on a daily basis: Contextual correlates and the link to work engagement. *Journal of Organizational Behavior*, 33(8), 1120-1141.
- Pitts, D., Marvel, J., & Fernandez, S. (2011). So hard to say goodbye? Turnover intention among US federal employees. *Public Administration Review*, 71(5), 751-760.
- Podsakoff, N. P., LePine, J. A., & LePine, M. A. (2007). Differential challenge stressor-hindrance stressor relationships with job attitudes, turnover intentions, turnover, and withdrawal behavior: A meta-analysis. *Journal of Applied Psychology*, 92(2), 438-454.

- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903.
- Prabhu, V. P. (2007). *Understanding the effect of proactive personality on job related outcomes in an organizational change setting*. Unpublished doctoral dissertation. Auburn, Alabama: Auburn University.
- Pratt, M.G., & Ashforth, B.E (2003). Fostering meaningfulness in working and at work. In K.S. Cameron, J.E. Dutton, and R.E. Quinn (Eds.), *Positive organizational scholarship: Foundations of a new discipline* (pp. 309-327). San Francisco: Berrett-Koehler
- Prieto, L. L., Soria, M. S., Martínez, I. M., & Schaufeli, W. B. (2008). Extension of the job Demands-Resources model in the prediction of burnout and engagement among teachers over time. *Psicothema*, 20(1), 354-360.
- PricewaterhouseCoopers (2012). *PWC Project Blue: Assessing the future trends for financial services*. Retrieved August 11, 2013, from [http://www.pwc.in/en\\_IN/in/assets/pdfs/financial-service/project-blue-for-india.pdf](http://www.pwc.in/en_IN/in/assets/pdfs/financial-service/project-blue-for-india.pdf)
- Rahman, M. M., & Iqbal, M. F. (2013). A comprehensive relationship between job satisfaction and turnover intention of private commercial bank employees in Bangladesh. *International Journal of Science and Research*, 2(6), 17–23.
- Ram, P., & Prabhakar, G. V. (2011). The role of employee engagement in work-related outcomes. *Interdisciplinary Journal of Research in Business*, 1(3), 47–61.
- Regts, G., & Molleman, E. (2013). To leave or not to leave: When receiving interpersonal citizenship behavior influences an employee's turnover intention. *Human Relations*, 66(2), 193–218.
- Renn, R. W., & Vandenberg, R. J. (1995). The critical psychological states: An underrepresented component in job characteristics model research. *Journal of Management*, 21(2), 279-303.
- Republic of South Africa. (2006). Health Professions Act, No. 56 of 1974. Ethical rule of conduct for practitioners registered under Health Professions Act, 1974. *Government Gazette 29079: Government Notice R717*.



- Richards, J. (2013). *Overview of the financial services sector in South Africa*. Retrieved August 24, 2013, from <http://www.frontiermarketnetwork.com/article/2347-overview-of-the-financial-services-sector-in-south-africa#.UpINDb78LIU>
- Richardsen, A. M., Burke, R. J., & Martinussen, M. (2006). Work and health outcomes among police officers: The mediating role of police cynicism. *International Journal of Stress Management*, 13(4), 555-574.
- Richardson, J. D., Lounsbury, J. W., Bhaskar, T., Gibson, L. W., & Drost, A. W. (2009). Personality traits and career satisfaction of health care professionals. *The Health Care Manager*, 28(3), 218-226.
- Rickli, S. G. (2010). *Job crafting*. Retrieved May 11, 2013, from [http://nolostcapital.com/sites/nolostcapital.nl/files/blog-attachments/Publicatie\\_Job\\_Crafting\\_Drs.\\_S.G.\\_Rickli.pdf](http://nolostcapital.com/sites/nolostcapital.nl/files/blog-attachments/Publicatie_Job_Crafting_Drs._S.G._Rickli.pdf)
- Rigg, J. (2013). Worthwhile concept or old wine? A review of employee engagement and related constructs. *American Journal of Business and Management*, 2(1), 31–36.
- Rigotti, T., Schyns, B., & Mohr, G. (2008). A short version of the occupational self-efficacy scale: Structural and construct validity across five countries. *Journal of Career Assessment*, 16(2), 238-255.
- Ros, M., Schwartz, S. H., & Surkiss, S. (1999). Basic individual values, work values, and the meaning of work. *Applied Psychology: An International Review*, 48(1), 49–71.
- Rosso, B., Dekas, K., & Wrzesniewski, A. (2010). On the meaning of work: A theoretical integration and review. *Research in Organizational Behavior*, 30(1-2), 91–127.
- Rothmann, S., & Hamukang'andu, L. (2013). Callings, work role fit, psychological meaningfulness and work engagement among teachers in Zambia. *South African Journal of Education*, 33(2), 1-16.
- Rothmann, S., Mostert, K., & Strydom, D. (2006). A psychometric evaluation of the Job Demands-Resources scale in South Africa. *SA Journal of Industrial Psychology*, 32(4), 76–86.
- Ryan, R.M., & Deci, E.L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology*, 25(1), 54 – 67.



- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52(1), 141-166.
- Ryff, C. D., & Singer, B. (1998). The contours of positive human health. *Psychological Inquiry*, 9(1), 1-28.
- Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21(7), 600–619.
- Salancik, G. R., & Pfeffer, J. (1978). Uncertainty, secrecy, and the choice of similar others. *Social Psychology*, 41(3), 246–255
- Salanova, M., Agut, S., & Peiró, J. M. (2005). Linking organizational resources and work engagement to employee performance and customer loyalty: The mediation of service climate. *Journal of Applied Psychology*, 90(6), 1217–1227.
- Salanova, M., & Schaufeli, W. B. (2008). A cross-national study of work engagement as a mediator between job resources and proactive behaviour. *The International Journal of Human Resource Management*, 19(1), 116-131.
- Schaufeli, W. B., & Bakker, A. B. (2003). *Utrecht Work Engagement Scale: Preliminary manual*. Unpublished manuscript. Utrecht: Utrecht University.
- Schaufeli, W. B., & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi sample study. *Journal of Organizational Behavior*, 25(3), 293–315.
- Schaufeli, W. B., & Bakker, A. B. (2010). Defining and measuring work engagement: Bringing clarity to the concept. In A. B. Bakker & M. P. Leiter (Eds.), *Work engagement: A handbook of essential theory and research* (pp. 10–24). New York: Psychology Press.
- Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire a cross-national study. *Educational and Psychological Measurement*, 66(4), 701-716.
- Schaufeli, W. B., Bakker, A. B., & Van Rhenen, W. (2009). How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. *Journal of Organizational Behavior*, 30(7), 893-917.

- Schaufeli, W.B., & Salanova, M. (2008). Enhancing work engagement through the management of human resources. In K. Näswall, J. Hellgren & M. Sverke (Eds.), *The Individual in the Changing Working Life* (pp. 380-402). Cambridge: Cambridge University Press.
- Schaufeli, W. B., & Taris, T. W. (2005). The conceptualization and measurement of burnout: Common ground and worlds apart. *Work & Stress*, 19(3), 256-262.
- Schaufeli, W. B., & Taris, T. W. (2013). A critical review of the Job Demands-Resources model: Implications for improving work and health. In G. Bauer, & O. Hämmig (Eds.), *Bridging occupational, organizational and public health* (pp. 43-68). Dordrecht: In press.
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3(1), 71-92.
- Schaufeli, W. B., Taris, T. W., & Van Rhenen, W. (2008). Workaholism, burnout, and work engagement: Three of a kind or three different kinds of employee well-being?. *Applied Psychology*, 57(2), 173-203.
- Schwab, K. (2013). *The global competitiveness report 2012–2013*. Cologny, Geneva: World Economic Forum.
- Scroggins, W. A. (2008). Antecedents and outcomes of experienced meaningful work: A person-job fit perspective. *Journal of Business Inquiry*, 7(1), 68–78.
- Seibert, S. E., Crant, J. M., & Kraimer, M. L. (1999). Proactive personality and career success. *Journal of Applied Psychology*, 84(3), 416–427.
- Shamir, B. (1999). Leadership in boundaryless organizations: Disposable or indispensable?. *European Journal of Work and Organizational Psychology*, 8(1), 49-71.
- Simon, M.K., & Goes, J. (2013) *Ex post facto research*. Retrieved September 25, 2013, from <http://www.dissertationrecipes.com/ex-post-facto-research/>
- Sirota, D., Mischkind, L. A., & Meltzer, M. I. (2006). Stop demotivating your employees! *Harvard Management Update*, 11(1), 3-6.

- Slatten, L. A., Carson, K. D., Baker, D. S., & Carson, P. P. (2013). An expansion of the beneficial outcomes associated with the proactive employees. *Institute of Behavioral and Applied Management*, 14(3), 162-172.
- Sonnentag, S. (2003). Recovery, work engagement and proactive behavior: A new look at the interface between non-work and work. *Journal of Applied Psychology*, 88(3), 518–528.
- Sousa-Poza, A., & Sousa-Poza, A. A. (2000). Well-being at work: a cross-national analysis of the levels and determinants of job satisfaction. *Journal of Socio-Economics*, 29(6), 517-538.
- Spreitzer, G. (1995). Psychological empowerment in the work place: Dimensions, measurement, and validation. *Academy of Management Journal*, 38(5), 1442–1465.
- Statistics South Africa. (2012). *Quarterly Labour Force Survey, 2nd Quarter*. Pretoria: Statistics South Africa and South African Data Archive, National Research Foundation.
- Steel, R.P. & Ovalle, N.K. (1984). A review and meta-analysis of research on the relationship between behavioural intentions and employee turnover. *Journal of Applied Psychology*, 69(4), 673–686.
- Steger, M. F. (2009). *The meaning in life: Seeking a life that matters*. Retrieved September 19, 2013, from <http://www.psychologytoday.com/blog/the-meaning-in-life/200906/meaningful-work>
- Steger, M. F., & Dik, B. J. (2009). If One is Looking for Meaning in Life, Does it Help to Find Meaning in Work?. *Applied Psychology: Health and Well-Being*, 1(3), 303-320.
- Steger, M. F., Dik, B. J., & Duffy, R. D. (2012). Measuring meaningful work: The Work and Meaning Inventory (WAMI). *Journal of Career Assessment*, 20(3), 239–241.
- Steger, M. F., Littman-Ovadia, H., Miller, M., Menger, L., & Rothmann, S. (2013). Engaging in work even when it is meaningless: Positive affective disposition and meaningful work interact in relation to work engagement. *Journal of Career Assessment*, 21(2), 348–361.
- Staw, B. M. (1981). The escalation of commitment to a course of action. *Academy of Management Review*, 6(4), 577-587.

- Staw, B. M., & Boettger, R. D. (1990). Task revision: A neglected form of work performance. *Academy of Management Journal*, 33(3), 534-559.
- Stone, E. F., & Gueutal, H. G. (1985). An empirical derivation of the dimensions along which characteristics of jobs are perceived. *Academy of Management Journal*, 28(2), 376-396.
- Strauss, K., & Parker, S. K. (2012). *Effective and sustained proactivity in the workplace: A self-determination theory perspective*. Retrieved October 8, 2013, from [http://accelwa.squarespace.com/storage/journal-articles/sharon/Strauss%20Parker-self-determinationproactivity\\_gagnesbook.pdf](http://accelwa.squarespace.com/storage/journal-articles/sharon/Strauss%20Parker-self-determinationproactivity_gagnesbook.pdf)
- Struwig, F.W., & Stead G.B. (2001). *Planning, designing and reporting research*. Cape Town: Masker Miller Longman.
- Saunders, M., Lewis, P., & Thornhill, A. (2007). *Research methods for business students* (4<sup>th</sup> Ed.). London: Prentice Hall.
- Sun, Y., Luo, Z., & Fang, P. (2013). Factors influencing the turnover intention of Chinese community health service workers based on the investigation results of five provinces. *Journal of Community Health*, 38(6), 1058-1066.
- Sverko, B., & Vizek-Vidovic, V. (1995). Studies of the meaning of work: Approaches, models, and some findings. In D. E. Super & B. Sverko (Eds.), *Life roles, values and careers. International findings of the work important study* (pp. 3-21). San Francisco: Jossey Bass
- Swart, J., & Rothmann, S. (2012). Authentic happiness of managers, and individual and organizational outcomes. *South African Journal of Psychology*, 42(4), 492–508.
- Swart, M. M. (2013). *The development and empirical evaluation of a comprehensive leadership-unit performance structural model*. Unpublished master's thesis. Stellenbosch: Stellenbosch University.
- Tabachnick, B.G., & Fidell, L.S. (2007). *Using Multivariate Statistics* (5<sup>th</sup> Ed.). New York: Allyn and Bacon.
- Tan, F. (2008). Linking career development practices to turnover intention: The mediator of perceived organizational support. *Journal of Business and Public Affairs*, 2(1), 1–20.

- Taris, T. W., & Kompier, M. A. J. (2006). Games researchers play: Extreme-groups analysis and mediation analysis in longitudinal occupational health research. *Scandinavian Journal of Work, Environment and Health*, 32(6), 463–472.
- Terre Blanche, M., & Durrheim, K. (1999). *Research in practice*. Cape Town: University of Cape Town Press.
- Terre Blanche, M., Durrheim, K., & Painter, D. (2006). *Research in practice: Applied methods for the social sciences*. Cape Town: University of Cape Town Press.
- Tett, R. P., & Meyer, J. P. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover: path analyses based on meta-analytic findings. *Personnel Psychology*, 46(2), 259-293.
- Theron, C. (2011). *Class notes: Industrial Psychology, Research Methodology*. Stellenbosch: Stellenbosch University.
- Theron, C. (2013). *Class notes: Industrial Psychology, Research Methodology*. Stellenbosch: Stellenbosch University.
- Thomas, K. W. (2000). *Intrinsic motivation at work: Building energy & commitment*. San Francisco: Berret-Koehler Publishing.
- Tims, M., & Bakker, A. B. (2010). Job crafting: Towards a new model of individual job redesign. *SA Journal of Industrial Psychology*, 36(2), 841–850.
- Tims, M., Bakker, A. B., & Derks, D. (2012). Development and validation of the job crafting scale. *Journal of Vocational Behavior*, 80(1), 173–186.
- Tims, M., Bakker, A. B., & Derks, D. (2013a). The impact of job crafting on job demands, job resources and well-being. *Journal of Occupational Health Psychology*, 18(2), 230–240.
- Tims, M., Bakker, A. B., Derks, D., & Van Rhenen, W. (2013b). Job crafting at the team and individual level: Implications for work engagement and performance. *Group & Organization Management*, 38(4), 427-454.
- Tobias, R. D. (2003). *An introduction to partial least squares regression*. Cary, North Carolina: SAS Institute Incorporated.
- Towers Perrin (2004). *Reconnecting with employees: Attracting, retaining and engaging your workforce, European Talent Survey*. London: Towers Perrin.

- Towers Perrin (2007-2008). *Closing the engagement gap: A road map for driving superior business performance, Global Workforce Study*. Stamford, Connecticut: Towers Perrin.
- Tausky, C. (1995). The meanings of work. *Research in the Sociology of Work*, 5(1), 15-27.
- Tumwesigye, G. (2010). The relationship between perceived organizational support and turnover intentions in a developing country: The mediating role of organizational commitment. *African Journal of Business Management*, 4(6), 942–952.
- Unsworth, K. L., & Parker, S. (2003). Proactivity and innovation: Promoting a new workforce for the new workplace. In D. Holman, T. D. Wall, C. W. Clegg, P. Sparrow & A. Howard (Eds.), *The new workplace: A guide to the human impact of modern working practices* (pp. 175-196). Chichester: John Wiley & Sons Ltd.
- Van Breukelen, W., Van der Vlist, R., & Steensma, H. (2004). Voluntary employee turnover: Combining variables from the ‘traditional’ turnover literature with the theory of planned behavior. *Journal of Organizational Behavior*, 25(7), 893-914.
- Van den Broeck, A., De Cuyper, N., De Witte, H., & Vansteenkiste, M. (2010). Not all job demands are equal: Differentiating job hindrances and job challenges in the Job Demands–Resources model. *European Journal of Work and Organizational Psychology*, 19(6), 735-759
- Van den Broeck, A., Vansteenkiste, M., De Witte, H., & Lens, W. (2008). Explaining the relationships between job characteristics, burnout, and engagement: The role of basic psychological need satisfaction. *Work & Stress*, 22(3), 277-294.
- Van den Heuvel, M., Demerouti, E., Bakker, A. B., & Schaufeli, W. B. (2010). Personal resources and work engagement in the face of change. In J. Houdmont & S. Leka (Eds.), *Contemporary occupational health psychology* (Vol. 1, pp. 124–150). Chichester: John Wiley & Sons Ltd.
- Van Dyne, L., & LePine, J. A. (1998). Helping and voice extra-role behaviors: Evidence of construct and predictive validity. *Academy of Management Journal*, 41(1), 108-119.
- Van Hove, G., & Lootens, H. (2013). Coping with unemployment: Personality, role demands, and time structure. *Journal of Vocational Behavior*, 82(2), 85–95.
- Van Kleveren, M., & Tijdens, K. (2007). *Work-related stress - WIBAR report no. 6*. Amsterdam: WageIndicator Foundation.

- Vlosky, R. P., & Aguilar F. X. (2009). A model of employee satisfaction: Gender differences in cooperative extension. *Journal of Extension*, 47(2), 1-15.
- Vreugdenhil, H. (2012). *Do older employee use task crafting in order to reduce the perceived misfit with their job?*. Unpublished master's thesis. Tilburg: Tilburg University.
- Vroom, V. (1964). *Work and motivation*. New York: Wiley.
- Watts, R. E. (2003). Adlerian therapy as a relational constructivist approach. *The Family Journal: Counselling a Therapy for Couples and Families*, 11(2), 139–147.
- Wefald, A. J., Smith, M. R., Savastano, T. C., & Downey, R. G. (2008, October). *A structural model of workload, job attitudes, stress and turnover intentions*. Paper presented at the Midwest Academy of Management Annual Conference in St. Louis, Missouri.
- Worthington, R., & Whittaker, T. (2006). Scale development research: A content analysis and recommendations for best practices. *Counseling Psychologist*, 34(6), 806-838.
- Wright, T. A., & Bonett, D. G. (1992). The effect of turnover on work satisfaction and mental health: Support for a situational perspective. *Journal of Organizational Behavior*, 13(1), 603–615.
- Wright, T. A., & Bonett, D. G. (2007). Job satisfaction and psychological well-being as nonadditive predictors of workplace turnover. *Journal of Management*, 33(2), 141-160.
- Wrzesniewski, A. (2003). Finding positive meaning in work. In K. S. Cameron, J. E. Dutton, & R. E. Quinn (Eds.), *Positive organizational scholarship: Foundations of a new discipline* (pp. 296–308). San Francisco: Berrett-Koehler.
- Wrzesniewski, A., & Dutton, J. E. (2001). Crafting a job: Revisioning employees as active crafters of their work. *The Academy of Management Review*, 26(2), 179–201.
- Wrzesniewski, A., Dutton, J. E., & Debebe, G. (2001). Interpersonal sense making and the meaning of work. *Research in Organizational Behavior*, 25(1), 93–135.
- Wrzesniewski, A., LoBuglio, N., Dutton, J. E., & Berg, J. M. (2013). Job crafting and cultivating positive meaning and identity in work. *Advances in Positive Organizational Psychology*, 1(1), 281–302.



- Xanthopoulou, D., Bakker, A. B., Demerouti, E., & Schaufeli, W. B. (2007). The role of personal resources in the Job Demands-Resources model. *The International Journal of Stress Management*, 14(2), 121–141.
- Yousaf, A., Sanders, K., & Shipton, H. (2013). Proactive and politically skilled professionals: What is the relationship with affective occupational commitment?. *Asia Pacific Journal of Management*, 30(1), 211–230.
- Zapf, D., Vogt, C., Seifert, C., Mertini, H., & Isic, A. (1999). Emotion work as a source of stress: The concept and development of an instrument. *European Journal of Work and Organizational Psychology*, 8(3), 371–400.
- Zheng, H., Li, D., & Hou, W. (2011). Task design, motivation and participation in crowdsourcing contests. *International Journal of Electronic Commerce*, 15(4), 57–88.



**APPENDIX A: Letter of proposal**

UNIVERSITEIT • STELLENBOSCH • UNIVERSITY  
jou kennisvennoot • your knowledge partner

**STELLENBOSCH UNIVERSITY**  
**LETTER OF PROPOSAL**

(Insert date sent)

To whom this may concern,

With reference to a discussion with (*Insert name of audit firm*), Human Resource Department, (*Insert name of regional office*), I am pleased to submit a proposal for your review.

In response to globalisation and competition, today's organisations are changing at an accelerating and radical pace. The demanding and often repetitive nature of work negatively impacts on employees' productivity and well-being. This is generally attributed to a lack of meaning in the workplace. Without a functional workforce, no organisation can survive. Therefore, organisations need to establish a balance between the provision of meaningful work and profitability.

I propose that (*Insert name of audit firm*) allow me to conduct a research study among their employees. The main objective of this research study will be to develop and empirically test a structural model that elucidates the relationship between employees' ability to modify their job context and content and meaningful work. Additionally, the individual and organisational variables which influence employees' inclination to engage in innovative behaviour directed at creating meaningful work will be examined.

Results will contribute to (*Insert name of audit firm*) in various ways. Firstly, findings will indicate whether employees at (*Insert name of audit firm*) perceive their work as meaningful. Secondly, it will assist (*Insert name of audit firm*)'s Human Resource Department in identifying the job resources available to their employees and the job demands they face. Thirdly, results will show whether (*Insert name of audit firm*)'s organisational structure encourages employees' personal modification of their jobs. Lastly, this research study will

point out the individual variables that affect employees' willingness to engage in job-crafting behaviour. This will be helpful in future recruitment and selection endeavours.

This research study focuses on exploring the eliciting factors of turnover intention and employee engagement in South African accounting firms. For this reason, the audit and accounting interns of (*Insert name of audit firm*), and their managers, have been selected to participate in this research study.

This research study has been ethically cleared by Stellenbosch University. Data will be collected by an online survey, and will be strictly confidential. Pilot study results indicate that the survey will take five to eight minutes to complete. The questions included in the survey have been derived from empirically validated measuring instruments. After data collection is completed, data will be subject to a range of statistical analyses. Results will be made available to (*Insert name of audit firm*), and a feedback session could be arranged. If approved, the study will commence as soon as possible.

Please contact me if you have questions. I look forward to your comments and suggestions.  
Thanking you for your kind consideration.

Sincerely,

Nicola van der Westhuizen

[nicolavanderwest@gmail.com](mailto:nicolavanderwest@gmail.com)

083 244 2424

**APPENDIX B: Informed consent form**

UNIVERSITEIT•STELLENBOSCH•UNIVERSITY  
jou kennisvennoot • your knowledge partner

**STELLENBOSCH UNIVERSITY**  
**INFORMED CONSENT TO PARTICIPATE IN RESEARCH**

**Turnover intention and employee engagement: Exploring eliciting factors in South  
African accounting firms**

*(Insert name of audit firm)* has been selected to participate in a research study conducted by Nicola van der Westhuizen, from the Department of Industrial Psychology, at the University of Stellenbosch. The results of this research study will be contributed to a master's thesis in Industrial Psychology.

This research study focuses on exploring the eliciting factors of turnover intention and employee engagement in South African accounting firms. For this reason, the audit and accounting interns of *(Insert name of regional office)* and their managers, have been selected to participate in this research study.

**1. PURPOSE OF THE STUDY**

In response to globalisation and competition, today's organisations are changing at an accelerating and radical pace. The demanding and often repetitive nature of work negatively impacts on employees' productivity and well-being. This is generally attributed to a lack of meaning in the workplace. Without a functional workforce, no organisation can survive. Therefore, organisations need to establish a balance between the provision of meaningful work and profitability.

The main objective of this research study will be to develop and empirically test a structural model that elucidates the relationship between employees' ability to modify their job context and content, and meaningful work. Additionally, the individual and organisational variables which influence employees' inclination to engage in innovative behaviour directed at creating meaningful work will be examined.

## 2. PROCEDURES

This research study has been ethically cleared by the Stellenbosch University. Once this proposal is approved by (*Insert name of audit firm*) data collection will commence as soon as possible.

An online survey will be distributed to the audit and accounting interns, and their managers. They will have three weeks to respond to the survey. Pilot study results indicate that the survey will take five to eight minutes to complete. The questions included in the survey have been derived from empirically validated measuring instruments.

To encourage participation, the practical and academic benefits of this research study will be outlined to individual participants. Furthermore, the design of the survey (i.e. length) and method of data collection (i.e. distributed electronically) has been carefully chosen to minimise any discomfort or inconvenience. Lastly, throughout the three week period weekly reminders will be sent to employees who have not completed the questionnaire.

After data collection is completed, data will be subject to a range of statistical analyses. Based on results, inferences and generalisations will be made. In conclusion a feedback report will be compiled to state findings and practical implications. The feedback report will be made available to (*Insert name of audit firm*) and supplemented with a feedback session.

## 3. POTENTIAL RISKS AND DISCOMFORTS

The risks associated with this research study are limited. Nevertheless, participation can cause minor discomfort or inconvenience. Employees participating in this research study will have to complete an online survey.

However, as previously mentioned, the design of the survey (i.e. length) and method of data collection (i.e. distributed electronically) has been carefully chosen to minimise any discomfort or inconvenience. Pilot study results indicate that the survey will take five to eight minutes to complete. Furthermore, employees will have a three week period to complete the survey.

## 4. POTENTIAL BENEFITS TO SUBJECTS AND/OR TO SOCIETY

Results will contribute to (*Insert name of audit firm*) in various ways. Firstly, findings will indicate whether employees at (*Insert name of audit firm*) perceive their work as meaningful. Secondly, it will assist (*Insert name of audit firm*)'s Human Resource Department in identifying the job resources available to their employees and the job demands they face. Thirdly, results will show whether (*Insert name of audit firm*)'s organisational structure

encourages employees' personal modification of their jobs. Lastly, this research study will point out the individual variables that affect employees' willingness to engage in job-crafting behaviour.

With regards to the broader society, expected findings will shed light on the seriousness of turnover intentions and lack of employee engagement among employees in South African accounting firms. Results will enable Industrial Psychologists to understand how they can remedy this problem. Other benefits include advances in scholarly research and valuable insights into future research endeavours.

## **5. PAYMENT FOR PARTICIPATION**

*(Insert name of audit firm)* will not receive any form of monetary payment for participating in this research study. However, the results of this research study will be made available to *(Insert name of audit firm)* in a feedback report. A feedback session can be arranged to discuss findings. Individual participants will be eligible win a R2 500 cash prize. The winner will selected randomly in the presence of two objective witnesses.

## **6. CONFIDENTIALITY**

Any information that is obtained in connection with this research study and that can be identified with *(Insert name of audit firm)* and/or individual participants will remain confidential. It will only be disclosed with their permission or as required by law.

To ensure confidentiality, the survey does not collect any information that can be used to personally identify individual participants or *(Insert name of audit firm)*. Furthermore, data collected upon the completion of the survey will be stored in a password protected electronic format. Access will be limited to the principal investigator, supervisor and statistician.

This research study is intended for publication at the Stellenbosch University. The published copy of the master's thesis will be made available to lecturers and students of the university for academic purposes. However, confidentiality will be maintained for *(Insert name of audit firm)* and individual participants.

## **7. PARTICIPATION AND WITHDRAWAL**

*(Insert name of audit firm)* and/or individual participants can choose whether to partake in this research study or not. If they volunteer to be in this research study, they may withdraw at any time without consequences of any kind. Individual participants may refuse to answer any questions they don't want to answer.

Importantly, the investigator may also withdraw (*Insert name of audit firm*) and/or individual participants from this research if circumstances arise which warrant doing so.

#### **8. IDENTIFICATION OF INVESTIGATORS**

If (*Insert name of audit firm*) and/or individual participants have any questions or concerns about the research, they can contact the principal researcher, Nicola van der Westhuizen, at [safsi.survey@gmail.com](mailto:safsi.survey@gmail.com) or 083 244 2424, or the project supervisor, Dr Billy Boonzaier, at [bb@sun.ac.za](mailto:bb@sun.ac.za).

If (*Insert name of audit firm*) and/or individual participants have any questions or concerns about the usage of the SU web-based electronic survey, they can contact Mrs Treunicht at [magriet@sun.ac.za](mailto:magriet@sun.ac.za).

#### **9. RIGHTS OF RESEARCH SUBJECTS**

If (*Insert name of audit firm*) and/or individual participants may withdraw their consent at any time and discontinue participation without penalty. They will not waiving any legal claims, rights or remedies because of their participation in this research study.

If (*Insert name of audit firm*) and individual employees have questions regarding their rights as research subjects, they can contact Mrs Maléne Fouché, from the Division for Research Development, at [mfouche@sun.ac.za](mailto:mfouche@sun.ac.za) or (021) 808 4622.

**SIGNATURE OF RESEARCH SUBJECT OR LEGAL REPRESENTATIVE**

The information above was described to me by Nicola van der Westhuizen in English. I am in command of this language. I was given the opportunity to ask questions and these questions were answered to my satisfaction.

I hereby consent that the audit and accounting interns, and their managers, of the (*Insert name of audit firm*) (*Insert name of regional office*) regional office may participate in this research study. I have been given a copy of this form.

\_\_\_\_\_  
Name of (*Insert name of audit firm*)'s representative

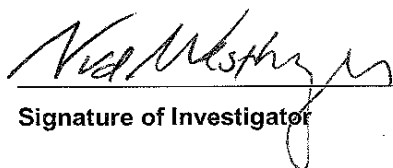
\_\_\_\_\_  
Signature of (*Insert name of audit firm*)'s representative

(*Insert date signed*)

Date

**SIGNATURE OF INVESTIGATOR**

I declare that I explained the information given in this document to (*Insert name of audit firm*)'s representative in the (*Insert name of regional office*) regional office. The representative was encouraged and given ample time to ask me questions. Conversations were conducted in English. No translator was used.

  
\_\_\_\_\_  
Signature of Investigator

(*Insert date signed*)

Date